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AN INTRODUCTION TO  
ABNORMAL PSYCHOLOGY



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# AN INTRODUCTION TO ABNORMAL PSYCHOLOGY

BY

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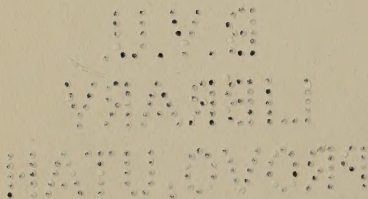
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SET UP, ELECTROTYPED, AND PRINTED BY T. MOREY & SON  
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TO  
MY PARENTS



## PREFACE

In this book I have placed considerable emphasis upon two points of view. The first of these is the assumption that mental abnormality is to be regarded as a purely relative matter, and that if one is to understand it he must first gain clear insight into those transition phenomena, those intermediate degrees, between the more normal and the more abnormal. To this end several somewhat general and introductory chapters have been devoted. The second point of view is that mental abnormalities can be most adequately understood and dealt with when viewed as disorders of the personality, of the individual as an integration, rather than as disorders of various mental processes or reactions. I have, in other words, followed the thesis—which, of course, is by no means a new one—that disordered thinking, for example, or grossly faulty perception assumes its full and true significance only when it is regarded as an indication of a *disordered personality*.

The book has been prepared as a text in a first course in abnormal psychology, and only such knowledge as usually results from a course in general psychology is presupposed. It is hoped, however, that the intelligent reader who has never had a formal course in psychology may find here something of interest and value.

I wish to acknowledge indebtedness and to extend thanks to various writers and publishers mentioned herein for their kind permission to use copyrighted material. I am also particularly indebted to my colleague, Professor Leland W. Crafts, for many criticisms and suggestions of value and for his painstaking care in reading most of the

manuscript; to my friend, Dr. James Quinter Holsopple, Chief Clinical Psychologist, New Jersey State Department of Institutions and Agencies, for much valuable aid; to my brother, Professor Vardis Fisher of the Department of English of New York University, for helpful suggestions in the presentation of materials; and to my wife for her patient assistance throughout the preparation of the book.

V. E. F.

NEW YORK CITY  
September, 1929

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with a second group which are extremely serious and which we shall call "major."

Here is a person—we all know him—who is forever complaining about his various ills. We become interested and a little solicitous and ask him to tell us about his sufferings; whereupon we may listen as long as we have patience to a story of headaches, eye-strain, blurred vision, dizziness, nausea, and abdominal pains and cramps; of "rheumatic" aches, extreme fatigue, insomnia, loss of appetite, and "nerves." He tells us, perhaps, that the thing which bothers him most is his almost complete exhaustion; that he has no energy, no vitality; that he finds it difficult to make the smallest physical or mental effort. And he assures us, too, that he is exhausted because he has no appetite and cannot sleep. He declares that in some nights he does not sleep at all, or that he gets no more than two or three hours of rest. Not only has he very little appetite; most foods disagree with him, and perhaps he lives chiefly on a cracker-and-milk diet. He also complains of being very sensitive to lights and sounds, and of being irritated by any change introduced into family routine. He asserts that it is quite impossible for him to concentrate his attention, and that if he tries to read or study he is troubled by blurred vision, eye-strain, and severe headaches. And although he may realize that his endless complaining and extreme irritability make life unpleasant for those around him, he insists nevertheless that his sufferings are so great and so constant as to leave him no peace of mind, and that he therefore finds it impossible to be good-natured or even silent.

But why (we may ask him) has he not gone to a good physician and got rid of these troubles. He smiles indulgently and gloomily shakes his head. Of course he has been to doctors, one after another; literally to dozens of

them. Some told him that his ills were imaginary, and that if he would stop thinking about them he would be all right. Others prescribed rest and diet. Still others declared that his nerves were tired and gave him nerve tonics. And he was told, finally, that he was too much concerned about himself, that he thought too much about himself and too little about other people and their troubles, and that if he would give his attention to other people and other things he would get well. But (he assures us) he has carried out all these suggestions and treatments, or he has tried to, but they all proved unavailing and his maladies became more severe. Having lost faith in physicians, he has been trying patent medicines, and though these have not cured him, he still has hope. As a matter of fact, he has read only recently of a new medicine, a sort of panacea for all ills, and he is now looking eagerly forward to that supply of it which he has ordered by mail.

Another person offers to our credulity a statement of his ailments. With him it is less a matter of aches and pains, irritability and fatigue; he is distressed, rather, by a strong, peculiar, and persistent feeling of anxiety. Let us suppose, in this case, that he is anxious about his health. He has been carefully examined many times, and here, as in the former instance, there has been no organic (physical) disturbance: physically, there is nothing wrong with him. He is unable, nevertheless, to overcome his anxiety. Although he has had his heart tested time and again, he cannot rid himself of the notion that he may very suddenly die of heart failure. In spite of all reassurance, he spends much of his time guarding himself against the slightest exertion or emotional stress, lest his heart should stop. Together with this fear that his heart may suddenly fail is considerable anxiety about his

throat, particularly in regard to eating. At times, indeed, he is almost overcome by a fear that he is going to choke on food. Eating, in consequence, becomes a long and painful process; he neglects his meals and is undernourished.

A third individual presents a still different picture. She is a young woman in college and above the average in scholarship; and yet, strangely enough, she has a constantly recurring fear of being stabbed with a knife. So far as she knows, she has never been attacked with a knife, and is therefore at an utter loss to understand this peculiar fear. Often, after she has retired at night, she becomes obsessed by the idea, and by the fear that her mother is going to stab her. Consequently, she lies awake for hours, on the alert against her mother's approach. She is wholly aware of the absurd nature of her fear, but she is powerless to conquer it.

Still another person has a peculiar fear of open spaces, such as very large rooms, the street, parks. If it is necessary for him to leave his room, he walks close to the buildings along the street, and if it is necessary to cross the street or an open space, he may find it impossible to summon enough courage to do so. And there is, on the other hand, the person who has a fear not of open spaces but of enclosures, such as telephone booths, theaters, rooms.

We have also the individual whose life is one endless turmoil of doubts, scruples, and uncertainties. He wakes in the morning and begins to dress, but cannot decide, after a little, which shoe to put on first. Each effort to decide forges his indecision, for in favor of either shoe there seems to be an equal number of reasons. He goes upon the street, when suddenly there comes to him a thought that he should cross the street and walk on the

other side. Immediately, however, there arises in his mind a doubt as to whether he should cross or remain where he is; and now, as before, he is arrested in a state of indecision.

On the street or the train or elsewhere we observe a person who jerks his head constantly from side to side for no apparent reason. He appears, moreover, to be quite oblivious of his mannerism, and gives no heed to the curious glances about him. Were we to ask him why he jerks his head, he would doubtless tell us that he does not know, that, in fact, he does not jerk his head at all but that it simply jerks of its own accord. He would perhaps also tell us that he is not conscious of the jerking, except when his attention is called to it. And we sometimes see other people who keep contracting their eyebrows in a peculiar or mechanical sort of way, or who keep squinting their eyes, or twisting their mouths out of shape, or jerking their shoulders or arms or placing their hands on their heads.

But we meet with still stranger anomalies. Here, for example, is an individual who is blind, and yet there is nothing physically wrong with his eyes, optic nerves or visual areas in the cortex. Another is able to see with only one eye; a third is blind for the right or left half of the visual field of each eye; and still others, belonging to this same general class, have insensitive hands or arms or legs. We may thrust a pin into the hand of such a person without his perceiving any pain or even knowing that his hand was touched. And yet there is nothing organically wrong with his hand; the nerves are intact and in a healthy condition. Some people are paralyzed and unable to walk, and perhaps the reader has noticed at one time or another newspaper reports to the effect that patients who had been paralyzed for years nevertheless

suddenly recovered their legs when a hospital or sanitarium caught on fire. Such reports, interestingly enough, are often true. And one person, with paralysis of both legs during his waking life, would often while asleep climb the stairs and go out on the roof of the hospital.

Occasionally we find persons who more or less periodically pass into trance-like states during which they talk and move but at the same time appear to be quite oblivious to their environment. In other words, although their talk and actions appear to be coherent and meaningful, they have no definite relation to the immediate surroundings, including other people who may be present. Or now and then we read of one who has forgotten who he is and where he lives. He not only does not know his name but may fail to recognize his relatives and friends. He has, in short, largely forgotten his past life. One such individual drew some money from his bank, gave himself a new name, and left the town where he lived. Some time later he was found in another place, engaged in a business which was quite foreign to his previous means of livelihood. And needless to say he was entirely unaware of his true identity.

A few examples have been mentioned of a large group of minor mental abnormalities which constitute a part of the subject-matter of abnormal psychology. If we now leave the everyday walks of life and those numerous clinics, sanitariums, and hospitals which care for these minor disorders and enter a mental hospital (insane asylum), we encounter a second host of abnormalities which are much more severe in many respects than those just enumerated.

**Some Major Mental Abnormalities.** Let us assume that we are being taken through the wards of a typical State mental hospital, pausing now and then to observe

this or that person. We come to a woman, forty-five or fifty years of age, sitting with hands folded loosely in her lap, an expression of utter dejection and despair on her face, and with tears slowly running down her cheeks. We stop to question her, but it is very difficult to induce her to talk. But finally, after much entreaty, she tells us that she is weeping because she has committed some unpardonable sin, that there is no hope of forgiveness, and that she is doomed to eternal punishment. Amid her weeping she says that she is unfit to live, that she is a vile and loathsome creature and should be put to death. Yet her case history reveals that she is the mother of a family, and that she has apparently always been faithful and conscientious in relation to husband and children. But if we assure her that she is honest and respectable and has nothing to reproach herself for, she only weeps the more.

As we move on, our attention is attracted to a patient who is in marked contrast to the one we just left. She sits very erect in her chair, with all the dignity of a queen. We address her as usual with, "How do you do, how are you today?" Her only answer is a haughty, disdainful glance in our direction and a slight stiffening of her body. Our guide whispers that she actually believes herself to be a queen; whereupon, becoming more deferential in our attitude, we make a second attempt to engage her in conversation. We may say: "Our only excuse for this intrusion, Madam, is a sincere wish to meet and talk to a person as noble and charming as yourself." This polite gallantry has its effect, and soon she has lost her haughtiness and restraint and is talking with us. She informs us that she is indeed a queen, that the other patients are her servants, and that the hospital is her castle.

We now observe a woman standing at a window and exclaiming in a loud, angry voice to someone below. We,

however, are unable to see any one, and we ask the patient to whom she is talking. She replies that those men below have been making insulting remarks to her, that they have been calling her indecent names; and she adds that she is a very respectable woman and will permit no one to disparage her character. Upon our calling her attention to the fact that there are no men on the ground below, she declares that they must have left.

Without taking time to go through all the female wards, we pass to the men's side. Here we meet a patient who converses very rationally about current events—so rationally, indeed, that we begin to wonder why he is in the hospital at all. We accordingly broach the matter as tactfully as we can. We are told, without the slightest hesitancy, that he was committed to the hospital through the influence of designing relatives who wished to get control of his estate. His talk is so coherent and logical as almost to convince us of its truth; but we learn, then, that he has never had an estate, and that, in fact, there is no basis whatever for his belief.

In other wards we encounter patients who, we are told, sit in the same chair day after day, without ever speaking to any one. By pleas, arguments, and threats, we try to lure them into talk, but we get no response at all. Other patients walk hour after hour in a circle, or up and down the ward; others maintain some peculiar posture, holding their hands above their heads, or sitting with hands folded in a certain manner on their laps, or lying stiffly in bed with clenched teeth, compressed lips, and wide, staring eyes. We observe that some patients, upon our approach, giggle and behave in a very silly way; and that, even while giggling, they will suddenly dart across the room and pick up some object or perhaps merely touch the wall or another patient and then walk away, mumbling to themselves.

We are taken, finally, through the ward where the most unruly patients are kept. Here we may encounter some who correspond quite closely to the popular conception of a "madman." Some walk excitedly about, shouting and swearing at the top of their voices; others quarrel among themselves; and in a far corner we see two attendants, trying to force a very obstreperous patient into his room and to lock him within, in order to keep him from attacking the other patients or demolishing the furniture.

We have now noted briefly a few illustrations from the field of mental abnormalities. The purpose of the following chapters is to make these phenomena and others as clear to the reader as our present knowledge will permit. In order, however, to understand these, it is absolutely essential that the reader should have clearly in mind a conception of the normal individual; and, although there is presupposed on the student's part a general knowledge of the basic facts and principles of general human psychology, nevertheless it will doubtless be worthwhile to review briefly some of this material and then to devote a few chapters to an attempt to make clear the close relationship of the normal to the abnormal.

We shall begin, therefore, with a discussion of the normal individual.

## CHAPTER II

### THE NORMAL INDIVIDUAL

**Normality a Concept.** Before beginning a discussion of the normal individual it may be well to remind the reader that in psychology *normality* is to be considered as a concept rather than an actuality. For instance, if a mental test is given to a large group of individuals and the mathematical average is taken as the normal, the score of no single individual in the group may exactly correspond to this average. If the median score is taken as the normal, then the score of at least one individual in the group is, of course, this median score, provided there is an odd number of individuals. But if other tests are given, including tests of special abilities, general intelligence, personality, etc., there will be but small chance indeed of the same individual's obtaining the median score in all the tests. Moreover, in actual practice, not only the individual having the median score or coming nearest to the average score is considered normal for the traits or capacities tested but also all individuals falling within certain arbitrary limits on either side of the median or mean. Those falling beyond these limits are considered unusual or abnormal; *i.e.* above or below normal. The *abnormal* individual differs from the *normal* individual, then, only in the matter of degree. This is a fact which must be kept in mind constantly throughout the pages of this book.

**The Individual's Basic Mental Aspects.** It will be our purpose in the present chapter to formulate a concept of

the normal individual, such as will give us the best basis for a study of the abnormal. For if the distinction between normal and abnormal made in the preceding paragraph is valid, everything that characterizes the abnormal is true in some degree of the normal individual.

Just as the individual is made up, structurally, of many different types of cells, so is he constituted, psychologically, of many different aspects or functions. It seems feasible from both a theoretical and a factual point of view to classify these various aspects under the following three general headings: (a) Cognitive, (b) Conative, (c) Affective.

Under *cognitive* are to be included all such processes as perceiving, reasoning, remembering, and imagining. By means of the perceptive processes the individual comes into contact with the world of forces which constitutes his environment. Changes within this environment are the facts perceived. Reasoning is a secondary process and consists primarily of the application of facts perceived in the past to an understanding of facts perceived in the present. Those processes which make it possible for the individual to apply facts perceived in the past to the present situation are called memory or remembering. Imagining consists essentially of the re-arrangement of facts perceived in the past in such a manner as to constitute new, though not actual situations. All these processes are to be viewed as adaptive mechanisms, which bring about adjustments of the individual to his environment, in part by virtue of their own immediate adaptive value and, in part, by "pointing the way," as will be brought out more clearly later, for overt behavior.

*Conation* or the conative aspect of the individual is referred to by different writers as tendency, urge, drive, motivating force, impulse, desire, etc. It is to be viewed

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not as a mechanism but as a force or energy. A mechanism may be thought of simply as a relationship of parts. And the activation of such a relationship is an expression or manifestation of energy; in the case of the living individual such a manifestation may consist either of overt behavior or of perceiving, thinking, imagining, etc. Hence, we may say that human activity is always a manifestation of energy, the nature of the manifestation (activity) being determined by the particular mechanism which is activated. The determination of the exact nature of the conative aspect lies outside the province of the psychologist. For him it is a dynamic principle, an explanatory concept, by means of which he explains not the particular type of behavior in any given instance but the fact of the behavior itself. The particular type of the behavior is determined by the specific mechanisms through which tendency manifests itself plus, as we shall shortly see, the nature of the affect. Thus, to speak of different tendencies is hardly in accordance with the general concept of the individual which is being given here. But since it would be difficult to escape the claims of an already established usage of such expressions as tendencies, motives, urges, etc., which imply a number of different dynamic factors, no effort will be made to do so in this text. It really makes little difference whether we postulate a single dynamic principle or several such principles. It would be more in keeping with the law of parsimony to postulate only one such principle. According to this postulate, the tendency to flee and the tendency to fight are not two different tendencies but rather the same tendency or principle manifesting itself in two different directions. The differences between the two cases are to be found in the cognitive and affective aspects present. Nevertheless we shall speak, as is customary, of tendencies or urges rather than of a single tendency or urge.

The term *affect* is used here to include both feelings and emotions. It is outside the purpose of the present text to go into an analysis of the feelings and emotions or to draw any sharp distinction between these two classes of phenomena. Without doubt we all have essentially the same type of experience in mind when we speak of "anger" or of "fear," and since it is impossible for one person to observe an experience of anger in another, our purely subjective knowledge of these facts must suffice for the present.

Now, while the cognitive aspects assume the nature of mechanisms and the conative aspects that of motivating forces, affect appears to partake of the nature of both. Feelings and emotions seem to constitute a sort of mediating factor between tendency and action. As Woodworth has pointed out, feeling is impulsive.<sup>1</sup> The same thing may be said of emotion. Merely the perception of a certain object may arouse the urge to flee, but if the individual becomes afraid, he will run faster. If a person is crossing a street and sees a car approaching, he will quicken his pace without necessarily experiencing fear or any other emotion or change in feeling-state. But now let some obstacle suddenly interfere with his movements before he is clear of the car and the chances are he will experience a great "wave" of fear, and with it his movements will become quicker and more energetic. Thus the fear itself appears to lend an additional impulse to motor activity. In this respect not only fear but all emotions partake of the nature of a tendency or motivating principle.

A second aspect of emotions tends to identify them as mechanisms. When one becomes extremely angry his whole attention becomes concentrated upon the object of his anger. The "field of consciousness" may become nar-

<sup>1</sup> Woodworth, Robert S., *Psychology*, Chap. IX. Holt.

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rowed to a mere focal point, the individual having no awareness for the time being of his surroundings in general or even of himself as a part of the total situation. Hence when angry, one is prone to do things which he is later ashamed of, and he usually explains such actions by saying that he "lost his head" or "forgot himself." So we find in strong emotion something that acts like a mechanism, serving to shunt all the available energy of the moment in one direction, through one group of response-organs.

The writer once observed a good example of this restricting influence of strong emotion upon awareness in the case of two animals. While out shooting one day he was attracted by the sound of two male badgers engaged in a most ferocious combat. Although the badger is ordinarily very shy at the approach of a man and for this reason is not frequently seen even in those parts of the country where he is common, in this particular case the writer was able to approach within a few yards and within plain view of the two combatants. They continued fighting without giving the slightest indication of any awareness of his presence. After watching them for a short time he shot first one and then the other with a small caliber rifle. Eight or ten shots were fired in all, perhaps at the rate of a shot every two or three seconds, and still the badgers gave not the slightest heed to the report of the gun or the sting of the bullets. The fight continued with diminishing intensity until both were dead, and even then the jaws of each were firmly locked upon some part of the other's body.<sup>2</sup>

In addition to these three fundamental aspects of the individual's inherent make-up there are certain relation-

<sup>2</sup> Of course it is a matter of assumption that a strong emotion was involved. It seems to the writer safe to infer that the badgers were angry at each other.

ships which also belong to his innate constitution. Upon the perception of a certain type of stimulus or situation, the individual tends to flee, to withdraw from the stimulus, and along with this tendency to flee, there is a specific emotional experience (inferred, in the case of the lower animal or human infant) which is called fear. An example would be the small child's fear response to a loud sound. Certain writers, recognizing the innate and unitary nature of such perception-tendency (behavior)-emotion integrations, have called them *instincts*. McDougall, for instance, defines instinct as ". . . an inherited or innate psycho-physical disposition which determines its possessor to perceive, and to pay attention to, objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object, and to act in regard to it in a particular manner, or, at least, to experience an impulse to such action."<sup>3</sup> But since the term "instinct" has been given different meanings by various writers, it seems advisable to substitute, throughout this text, the term "innate disposition."

**Innate Dispositions.** Psychologists are by no means agreed as to the number and nature of man's innate dispositions, and, unfortunately, the experimental data bearing upon the problem are very limited. Indeed, one writer appears to have gone so far as to deny the validity of any such concept as that of innate dispositions in man. Nevertheless, this same writer has experimentally demonstrated certain unconditioned responses in the small child to specific types of stimuli.<sup>4</sup> That all dispositions which we shall postulate have not been demonstrated under conditions of experimental control, does not, of course, mean that they do not exist. And since, for the psychologist,

<sup>3</sup> McDougall, Wm., *An Introduction to Social Psychology*, 16th ed., 1921, p. 29. Luce.

<sup>4</sup> Watson, John B., *Behaviorism*, Chap. VII. Norton.

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an innate disposition is primarily a concept, the sole purpose of which is to explain observable facts, his principal criteria in the formulation of such a concept are the Laws of Utility and of Parsimony. In other words, the concept must be both adequate as an explanation of the facts to which it relates and simpler than any other conceivable explanation.

It is sometimes argued that if a certain type of behavior in the adult is to be explained in terms of an innate disposition, evidence of the same disposition should be found in the case of the child. This is equivalent to contending that if we are to consider a man's mustache a natural or inherent feature, we must, therefore, find evidence of a mustache in the child. It must be remembered that the unfolding, or development, of the individual's inherent attributes begins at the time of fertilization and continues not only until birth but until maturity is reached. Perhaps it would even be more correct to say until death. Consequently we cannot hope to understand the innate constitution of the human adult solely from a study, however exhaustive, of the child. Rather, it is necessary to follow closely the development of the individual from infancy to maturity, always resolving, if this is possible, any change which appears in terms of those factors which are already recognized to exist. When this is impossible, it becomes necessary to formulate an explanatory concept.

In briefly mentioning some of the most important and universally recognized innate dispositions, the postulation of which has been necessary to explain experience and behavior, it will be most profitable to study them as manifested in the lower animal and in the child since here they are less complicated by factors of experience and training. In each case the innate disposition under consideration will be designated by its conative, affective, or

cognitive name, depending on which is most favored by current usage.

*Anger* is a well-known innate disposition which is manifested by most if not all mammals, including man. Along with the affective state there goes the tendency to attack, to overcome or destroy the object which is responsible for the arousal of the disposition. Seemingly the most adequate stimulus for the arousal of anger is the interference with the free movements of the individual. The puppy growls and bites if it is forcibly restrained, and may continue its attack even after being released. The young child does not hesitate to strike its mother if she interferes with its movements or stands in the way of its doing what it wants. If the arms and legs of a small child are held fast at a time when it is actively engaged in doing something, there usually will result squirming and twisting movements, accompanied by crying and screaming, flushing of the face, and a tensing of the muscles throughout the body. Often the child will strike at its tormentor as soon as it is released. One may frequently observe children of six or seven vent their wrath upon a stick which they have tripped over by beating it, stamping on it, or by throwing it to the ground. And even adults are wont, upon walking through thick brush and being switched in the face, to break the offending twig from the tree and throw it to the ground with unmistakable signs of anger.

Adult human life is full of instances of the expression of anger and the desire or tendency to retaliate, but since such manifestations are frowned upon by society, they are seldom as apparent as in the child or lower animal. Anger, moreover, is frequently complicated by the presence of other affects, and the behavior by the presence of more than one tendency. Many men curse audibly when caught in a traffic jam, or when the "static" prevents them from

hearing what is being said over the radio. A man will usually manifest anger if his attempts to secure the attention and esteem of a certain woman are frustrated by a third party. And many men become angry at their boss because they are not permitted to carry out some pet idea, later venting their anger upon their innocent wives and so making themselves enigmas to their families. School teachers often find in their students convenient objects upon which to vent the anger aroused by their academic superiors, or, perhaps, by a too domineering wife.

A second strong and important innate disposition is that of *fear*. This emotion, together with the tendency to flee from the exciting stimulus, plays a surprisingly prominent rôle in the lives of many persons. On the other hand it is entirely possible that many of us are so well guarded from all fear-exciting stimuli that we go through life without ever experiencing an extreme degree of this powerful emotion. The fear disposition appears to be the antithesis of anger in several respects. Whereas the emotion of anger can hardly be said to be distinctly unpleasant or painful, that of fear is decidedly so. In fact, it is so unpleasant that we find certain individuals deliberately placing themselves in somewhat fearful situations for no apparent reason other than that of the pleasure afforded them by their subsequent escape, which they are reasonably certain of at the beginning. The persistent tendency observed in some persons to ride scenic railways, while knowing beforehand that the ride is going to occasion them considerable fear, is a case in point. A second antithetical difference between anger and fear consists of the opposite types of behavior which accompany the two emotions. In fear the reaction is negative, away from the stimulus, while in anger it is positive, toward the stimulus.

Fortunately there are certain experimental results at

hand upon which to rest some of our conclusions concerning the fear-disposition in man.<sup>5</sup> It has been demonstrated that early in life the child shows a fear-reaction to two different classes of stimuli—a loud sound and the loss of physical support. Whether or not this particular innate disposition is inherently linked up with, or attached to, other kinds of stimuli we cannot definitely say. That the small child fails to show fear at the approach of large animals does not, of course, prove that the traditional fear of large animals in the adult is acquired. It is a fact of universal observation that the small child does not have wisdom teeth; but we should not, therefore, conclude that wisdom teeth in the adult are an acquired and not a natural or inherent trait. It is essential always to keep in mind that the child is in no sense a complete human individual, but is as truly in the process of development as it was before it left its mother's body. Consequently, the absence of a given trait or aspect in the child does not prove the later appearance of the trait to be a matter of acquisition rather than natural development. Menstruation is a natural function in the woman, but it seldom occurs in the girl before the age of ten or eleven and almost never before the age of four or five. At the same time it is equally essential that we should be careful not to postulate new inherent traits, or dispositions, to explain facts which can be adequately understood in terms of traits already postulated plus experience or conditioning.

A third innate disposition and one of great importance to an understanding of the abnormal individual is that which McDougall terms the *self-assertive* instinct.<sup>6</sup> Any one who denies the existence of such a disposition in the human individual leaves much to be explained both in ex-

<sup>5</sup> *Ibid.*, Chap. VII.

<sup>6</sup> *Op. cit.*

perience and behavior. The small boy shows an unmistakable tendency to assert himself, to dominate his environment. And, since he learns from experience that adults are superior to him, that he cannot successfully compete with them, he perforce does the next best thing, which is to accomplish a sort of self-identification with certain of them—usually his parents—and measure these, instead of himself, against others. What youngster of average training does not think his father the strongest, bravest, and smartest man in the world and proclaim his belief loudly to his playmates whenever the subject of fathers is broached? But this matter of self-identification by no means satisfies the average boy's desire to be master of his surroundings, the center of the picture, and consequently we find him asserting himself with respect to his parents, smaller children, his pets, and even inanimate objects. We have all observed the unquestionable signs of keen pleasure which the boy manifests upon making his dog obey his every command in the presence of the attentive visitor, or in winning at marbles, or in being leader of his "gang." Still another way wherewith he gains from others esteem and envy (which, of course, are readily translated into superiority for himself) is through the possession of inanimate objects that are desired by other individuals and that are in some way superior to the things belonging to them. Thus we hear the boy shouting, "My kite's the highest!" "My bat's better'n yours!" "My knife's better'n yours—it'll out-cut yours!" "I've got more marbles 'n you!" and so on as long as one cares to listen. At school he may strive to be at the head of his class, or to be the bully of the playground, or to be the teacher's pet may be the highest distinction of which he can conceive. It seems highly probable that the rather common practice among boys of tormenting small ani-

mals is rooted in this same innate disposition of the individual to assert himself over other things, both living and dead.

The little girl has in her doll another "person" whom she may dominate at will. She dresses her, puts her to bed, scolds and spansks her, and, in short, does all those things which her mother in turn has done to her and which are among the indications of the former's supremacy. And since she recognizes no inherent distinction between the two sexes, we frequently find her competing with boys, trying to excel them at their own games, and to win their favorable recognition.

The stimuli which are potent in arousing the self-assertive disposition have not yet been experimentally isolated. We have, therefore, only our everyday observations to guide us. Perhaps it is safe to say that of all man's innate dispositions self-assertion is the least dependent upon the perception of specific types of stimuli or situations. Certainly it can be said that wherever human individuals are found living in a society, there is no lack of manifestation of the self-assertive disposition. But it has already been pointed out that in the child this disposition comes into play not only in relation to others of its kind but with respect to lower animals and even inanimate objects. Perhaps we may say, then, that whereas the most potent stimulus for the arousal of the self-assertive disposition is perhaps the recognition of one's superiority to those about him, we should hesitate to confine its arousal solely to this kind of situation.

The affective aspect of the disposition under consideration is also somewhat difficult to define clearly. With the successful assertion of one's self goes a feeling of self-confidence, superiority, and elation, which is highly pleasant. If one tries to assert himself and fails, he usually

experiences a feeling of humiliation, inferiority, and dejection, which is decidedly unpleasant. .

Holding a very close relation to the self-assertive disposition, and being in many respects its opposite, is that of *self-submission*. Just as the puppy crouches at the feet of the larger dog when the latter growls, showing no fear but rather behaving in that peculiar manner which we call *submissive*, so does the child often assume a very similar attitude in the presence of the adult, particularly if the adult is a stranger. Hence it would appear that the most natural stimulus for arousing the self-submissive disposition in the individual is the presence of other individuals who give him the impression of being his superiors.

The incompatibility of the dispositions of self-assertion and self-submission, together with the fact that the same situation often tends to arouse both, gives rise to a peculiar and interesting type of behavior. Thus, in the presence of a visitor the child will often alternate between half-concealing himself behind his mother's dress, and performing antics in the middle of the room to which he calls the visitor's attention by shouting, "Can you do this?" If the visitor demonstrates that he can, he at once ascends in the estimation of the child. If he goes further and performs stunts which the child is incapable of, he becomes a superior person. From the child he has won recognition of his superiority and the former will usually at once give evidence of his readiness to assume, in relation to him, a subordinate position.

Along with the self-submissive tendency goes the feeling of inadequacy or inferiority and often of dependency. Whether this affect may in itself be pleasant is a moot question. Certainly any number of persons appear to submit to others with the greatest pleasure, but whether such submission is but an indirect way of asserting themselves,

is always more or less problematical. It seems quite probable that there is always some degree of self-identification with the person to whom one willingly submits. The child, therefore, will frequently submit to the adult with the best of good grace and apparent pleasure and in the very next breath boast of the other's achievements as if they were his own.

Finally, we must mention what socially and psychologically is most significant of all man's innate dispositions; the *sexual disposition*. Whether "sex" is a single disposition similar to those which have been discussed, or whether it is a composite of several partial or complete dispositions, remains a much disputed question. But in so far as our present interest is concerned, it may be treated as a single disposition like the rest. The adequate stimulus for the sexual tendency is a member of the opposite sex; the accompanying affect, called *lust*, is definitely pleasurable, and the typical behavior or manifestation of the sex urge consists usually of a certain amount of wooing followed by the act of mating or copulation.

It is perhaps true that the disposition of sex is as frequently a factor in the genesis of mental disorders as all man's other innate dispositions combined. This results, however, not from the inherent nature of the disposition itself nor because it is the sole, or even principal, motivating force of behavior, as certain writers contend, but rather because more social, moral, and ethical concepts, more criteria of conduct, and more restrictions and taboos, have been established around this one disposition than around the sum-total of all others.

There are other reasons, though really derivatives of society's attitude toward sex, why sex is such a frequent contributing factor to the development of mental disorders. On a previous page the self-assertive disposition

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was said to be an important determinant of man's social behavior. Now in most primitive human societies, as well as among most of the lower animals, the sexual disposition and the self-assertive disposition go hand in hand. For there, the individual's importance, or strength, is largely measured in terms of the number of females he possesses.<sup>7</sup> In other words, in many primitive societies one of the chief ways in which the self-assertive disposition manifests itself is in the direction of possessing the opposite sex. Accordingly these two strong dispositions meet on common ground, prove entirely compatible, and, therefore, cause the individual no distress.

But with the advent of monogamous marriage and ideals, with the immeasurable influence of religion (particularly of Christianity), and with the development of more and more social and moral concepts involving the question of sex, the disposition of sex and that of self-assertion have come into partial conflict with each other. Or, stated otherwise, the sex disposition has come into increasing conflict with society's standards, which, through conditioning, become the individual's standards.<sup>8</sup>

Very little that is definite can be said at the present time in regard to the age at which sex makes its appearance. The traditional belief that the child is essentially sexless until pubescence is reached has been largely exploded by the work of Freud and others. And it has undoubtedly always been common knowledge among mothers that certain practices, which can hardly be interpreted as anything save the manifestations of sex, are not uncommon in children of a very tender age. Masturba-

<sup>7</sup> Even in our modern society, men are not infrequently found whose self-esteem, as well as the esteem with which others regard them, is primarily and intimately associated with their success in seducing women.

<sup>8</sup> The exact manner in which conflicts arise between the various innate dispositions, and between these dispositions and the individual's morals and ideals, will be discussed in some detail in a later chapter.

tory practices, sometimes to an excessive extent, are not infrequent in children of the age of two or three; and, although it is impossible to prove that the pleasure (sensations) derived from such practices is of a truly sexual nature, it seems more reasonable to assume this than that the pleasure is non-sexual in the child but sexual in the adult, the type of stimulation remaining the same. That the individual does not usually recall such practices upon reaching maturity is no more surprising than the fact that the mother seldom mentions them.

But whatever the nature of the affective experience which accompanies masturbation early in childhood, it is an established fact that the boy may experience long before sexual maturity is reached the same intense pleasure and satisfaction which normally goes with sexual intercourse in the adult. The sole difference between the two cases is that in the boy there is an absence of the ejaculation. Certainly not a few adults are able to trace their earliest sexual experiences back to the fifth or sixth year of life. All these facts taken together seem to indicate very strongly that the child is capable of having, and often has, unmistakably sexual experiences long before he attains sexual maturity or is able to comprehend the true nature of the sex function.

In addition to those innate dispositions which have thus far been discussed, there are undoubtedly others which are just as truly aspects of the inherent mental constitution of the human individual. But those which have been mentioned not only will suffice to give the reader a fairly good notion of what is meant by an innate disposition; also they appear to be the most important ones for an understanding of abnormal psychology. If we can now show how these dispositions become modified and elaborated, and combined or integrated into larger systems under the

influence of the environment, and how these modifying, elaborating, and integrative changes give rise to what we term the personality, we shall have laid a very good foundation for the study of abnormal individuals.

**Conditioning.** It is a well-known fact of general psychology, and one with which the reader should be familiar, that any given innate disposition may be attached to (*i.e.* conditioned to) almost any perceptible aspect of the environment, provided such aspect is perceived simultaneously with, or immediately preceding, a stimulus which is adequate for the arousal of the disposition. At first the child fondles and plays with the dog, but if the dog bites him or if he is otherwise injured or frightened while playing with the dog, the dog will thereafter awaken in the child the fear-response. And any object similar to the dog, or the name of the dog, or the word *dog*, may serve to call forth the fear-response. Let us assume that a loud sound is made behind the child while he is playing with the dog, or, better still, that the dog growls and barks and frightens the child. Thereafter, we observe, the mere sight of the dog frightens the child. Now, just what and where is the change which has occurred in the total situation? First, we observe that the presence of the dog now arouses a certain disposition (fear) in the child which it formerly did not arouse; and, secondly, we notice an absence of any manifestation of the disposition (play, curiosity, or whatever we wish to call it) which was originally aroused by the dog. Yet the stimulus has not changed; the dog remains as before. Obviously we must assume that the change has to do with the perception of the stimulus. (Thus we see the necessity, in psychology, of distinguishing between the stimulus and the individual's perception or experience of the stimulus.) Without holding ourselves to an exact definition of terms

at this point, we may assume that originally the dog stood simply for an object of the child's environment, having no particular significance; just something to be explored, examined; merely an object which aroused in the child positive behavior. Then, at a time when the child's attention was upon the dog, the child was frightened. We may now assume that the child failed to distinguish clearly between the various aspects of the total situation with the result that he reacted with fear not only to the barking of the dog (loud sound) but to the situation as a whole. After the child has reacted a number of times to the total situation, any prominent aspect of it is sufficient to elicit the same response; for a single aspect of the former situation now represents the whole, just as a person's voice, walk, or mode of dress may signify or represent him to another individual.

There are various other theories which have been advanced to explain the type of phenomenon which has just been described and which is now currently termed "conditioning." Two of these theories will be mentioned. The first is to the effect—taking again the example just used—that upon perceiving the dog at a later time, the child recalls (associates with it) his previous unpleasant experience with the result that fear is again induced. There is no evidence that any such associative process takes place, whereas there is considerable evidence to the contrary. We can at least say that if it does occur, it is seldom conscious or known to the individual.

A second explanation which is frequently offered is couched in terms of stimulus-response psychology. It will be observed that in the example of the child and the dog we are dealing with a typical case of substitute response which, of course, can be readily translated into a case of substitute stimulus. Now the explanation offered

by the stimulus-response psychologist makes it necessary to assume a preëxisting "loose linkage" between the substitute stimulus (sight of dog) and the response (fear and withdrawing movements).<sup>9</sup> In other words, he postulates what he attempts to explain. Having an already existing linkage between the substitute stimulus and the response, practice is all that is required to strengthen the bond, and we then find the response invariably occurring.

Of the three given, the first explanation seems preferable. It is a fact of everyday experience that we tend to perceive the various aspects of a situation as a whole if they are in any way related. We perceive an individual not as so many parts, two ears, two eyes, a nose, a mouth, arms, legs, etc., but as a single individual, a unification or relationship of parts. Thus it is frequently said that perception is a unifying process; it unifies or groups the various aspects of our environment. Hence the perception of any part, if the part is recognized, tends to call forth the response originally made to the whole. The barking of the dog (or the loud sound) is combined with the other aspects of the dog: his size, shape, furry appearance, etc. The barking arouses a certain innate disposition, and thereafter any other readily perceptible aspect of the dog, as, for instance, his furry appearance, elicits the same emotion and behavior.

The reader will easily recognize as the basis of most of those relationships or linkages existing between the innate dispositions of the adult individual and the various aspects of the environment, the same general type of conditioning process that we have been describing. But he must not lose sight of the fundamental fact that before a disposition can become attached to a normally indifferent aspect of the environment, it must first be aroused by

<sup>9</sup> Woodworth, R. S., *Psychology*. Holt.

one of its own natural, or adequate stimuli in conjunction with the indifferent stimulus. In the beginning, most of the various aspects of the child's environment call forth only a more or less general type of positive behavior, a tendency to manipulate, to explore, to examine. These aspects have no definite significance; they are merely objects or things or changes. But there are certain stimuli which do have a definite significance; they arouse some specific innate disposition upon the child's first encountering them. Being unable to distinguish the true from the false, the adequate from the inadequate, the child reacts not only to the specific stimulus or aspect of the situation which is responsible for the arousal of the disposition but to the various other aspects of the situation; *i.e.* to the situation as a whole. Thus all the different aspects of the situation assume to an extent a common significance and therefore become adequate stimuli for the arousal of the disposition.

As the child grows older he becomes more sagacious, more discriminating, more analytical. He not only learns from experience what the different aspects of his environment stand for, what they signify, but he also, due to his developing capacity for accurately perceiving his surroundings, becomes increasingly more capable of making discriminations between the true and the false, the essential and the superfluous, the part and the whole. The cognitive aspect of his nature is developing; we say he is becoming more intelligent. Along with this he assumes a more and more definite relationship to his environment; things take on more exact meanings; his reactions become more direct and clear-cut. Day by day he becomes more truly an adaptive individual. Slowly he learns the ways and means, as his understanding of things increases and his intelligence slowly unfolds itself, of adjusting him-

self properly to the innumerable diversities and complexities of his social existence. But all this is only one aspect of the child's mental development.

**Sentiments and Attitudes.** The individual's innate dispositions not only may, and do, become attached to the various aspects of his environment; they become combined into larger dispositions or systems. This fact is of fundamental importance for the understanding of the personality and of personality disorders. With the combining, or integration, of these primary dispositions into larger systems or secondary dispositions, there results a mutually modifying influence among them, outwardly manifested by a compromise type of behavior. This is one of the chief differences between the behavior of the adult and the child, or of the adult human and the lower animal. For instance, the behavior of the child or the lower animal is usually definitely positive or negative; if suddenly confronted by a threatening object, he attacks it or flees from it. Ordinarily some one disposition wholly determines his behavior for the time being. Thus in speaking of the child, we frequently say he is the victim of his impulses; his behavior is extreme, one-sided, unbalanced. The human adult, on the other hand, may neither run nor attack; he may hesitate, or vacillate, or attempt simply to ignore the object.

This combining and unifying process takes place under the influence of the environment, particularly other individuals, and is itself an aspect of the individual's adaptation to that environment. Or to be a little more psychological, it may be said to take place as a result of the developing cognitive aspect of the individual and his repeated reactions to his environment. A small boy may be extremely afraid of his father and at the same time frequently angered by his father's actions toward him. His fear together with a recognition of his own helplessness tends to

check any outward expression of his anger, and at the same time his anger together with a recognition of his dependence on his father keeps him from running away. Thus, the situation being such that he cannot follow either impulse, the two dispositions become more or less organized into one, giving rise to a passive or half-guarded attitude toward his father, accompanied by the slow development of a complex emotion which we call *hate*.

Or we might take the case of the ambitious young man desirous of demonstrating his worth upon meeting a young woman who impresses him as being a very superior and charming person, and with whom he inevitably falls in love. Now, having become her most favored suitor, when he is in her presence he is not only happy and sexually stimulated but he is also proud, elated, and self-satisfied. Here we have two strong innate dispositions which, under the circumstances, are entirely compatible. Eventually winning the girl promises both to satisfy the sex disposition and, at least to a considerable extent, the self-assertive disposition. To win for himself a girl who is a charming, admirable, and superior person, *the* one girl in the world, is to assert his superiority over all his male acquaintances, particularly his rivals. Under the influence of the cognitive elements associated with the girl, these two dispositions become integrated into a single more complex mental system.

When two or more innate dispositions become integrated because of their processes relating to the same unitary aspect of the environment, to form a secondary mental disposition of a more complex nature, we speak of such a secondary disposition either as a *sentiment* or an *attitude*. A sentiment always involves two or more innate dispositions. Some common examples of sentiments are *mother sentiments*, *religious sentiments*, *political sentiments*, *patri-*

*otic sentiments* (*patriotism*), *love*, *hate*, *jealousy*, etc. Very similar to such mental dispositions, but differing from them in that they are relatively lacking in the emotional aspect, are other mental systems which might best be called *attitudes*. Whereas the most outstanding characteristic of the sentiment is its affective aspect, that of the attitude is its cognitive or intellectual aspect. We might speak of one's attitude toward science, or psychology, or painting, assuming that the individual in question is not emotionally concerned about these things. One person, of course, may have a very cool intellectual attitude toward religion, for instance, while another may have a strong religious sentiment. It is important to remember, however, that we conceive of the difference between an attitude and a sentiment as being wholly relative.

Our sentiments and attitudes are living dynamic aspects of us; they are the guides as well as the motive forces of most of our everyday behavior. When one meets his mother unexpectedly, he does not stop to recall the thousands of things his mother has done for him, his thousands of previous reactions to her, before assuming a certain bearing toward her, before reacting to her in a definite manner, yet it is exactly the thousands of things his mother has done for him (*i.e.* his repeated perception, recognition, and intellectual appreciation of such) which have resulted in the development in him of a determinant of his present reactions to her. This determinant, which we would call his mother sentiment, is an organization or integration of various innate dispositions with respect to a certain object, his mother.

Essentially the same thing may be said with respect to our attitudes. If one questions you concerning your attitude toward prohibition, you will ordinarily reply to his question at once. (We are assuming that you are not

extremely interested personally in the issue.) You do not wait to recall all the arguments you have heard and read pro and con on the question or even your own personal experiences in the matter. All such experiences, all that you have read and heard and thought, have been integrated into a mental disposition which functions as a unitary determinant of your reactions of the moment. We have some such determinant of experience and behavior in mind when we use the term mental attitude. We must assume that our attitudes, like our sentiments, involve as a sort of nucleus two or more innate dispositions. But because of the relative lack of the affective aspect, it is often difficult to decide the nature of the innate dispositions underlying a given attitude. Perhaps the disposition most commonly involved is *curiosity*. Often an attitude seems to be a sentiment which has lost its affective coloring.

It is obvious that two sentiments or attitudes may be in harmony with each other or may be incompatible. When incompatible sentiments are aroused simultaneously, an emotional conflict results. Examples of such conflicts occurred on a large scale as a result of incompatibility between religious and patriotic sentiments during the recent World War. Incompatible attitudes give rise to intellectual conflict or indecision. A strong sentiment and an attitude if incompatible, and if aroused simultaneously, result in a conflict between reason and feeling. But these matters will be treated more fully in a later chapter.

We have attempted to point out briefly how, under the influence of his environment, the individual's innate dispositions become greatly elaborated on their cognitive side and combined or integrated to form more complex dispositions, or sentiments and attitudes. We have further

pointed out the all-significant fact that such a sentiment or attitude always exists by virtue of its relation to some aspect of the environment. We have yet to show how these secondary dispositions become integrated to form a more or less unified whole, giving rise to the personality. In order to do this, we must again return to a consideration of the child.

**The Personality.** During the first few years of his life the child is a thoroughly ego-centric, asocial, selfish young animal. He lives wholly in a world of pain and pleasure, of dissatisfaction and satisfaction. He seeks to avoid the one, and strives to attain the other. He is entirely unmoral and unethical and consequently he is devoid of any "sense" of duty or obligation. He has no appreciation of, nor does he willingly accept, the social values and standards of those about him. He ceases to strike his baby sister only if he learns from experience that to do so is going to result in pain to himself. He stops taking jam from the pantry only because this also has come to mean punishment. Along with these experiences he may learn ways and means of obtaining what he wants and at the same time of avoiding punishment. Thus he takes jam, his mother spansks him, and he cries. Then, to stop his crying, his mother yields. After this procedure has occurred a few times, he cries to begin with and his mother gives him jam. He has perceived, however vaguely, a causal connection between his crying and getting the jam. But although the child may stumble upon various devices for gaining his ends without incurring punishment, he remains for some time thoroughly selfish, quite impervious to truly socializing influences. He is not yet a social being; he is little more than a collection of innate dispositions which, upon being aroused, tend to manifest, or satisfy, themselves in the most direct manner possible and without regard to the cost to others.

But a sense or appreciation of his own individuality is slowly developing in the child. Gradually he comes to distinguish between himself and his surroundings, to perceive himself as a separate and distinct individual. He learns that his thoughts, feelings, desires—in short, all his experiences—belong only to himself, and that others do not know about these things unless he tells them. In other words, whereas for the first few years of life the individual is not self-conscious and extends himself, so to speak, to include his surroundings, he gradually learns to make that distinction, so fundamental to the truly social being, between self and not-self.

With the beginning of this gradual development of self-consciousness the child takes the first significant step toward becoming a social being. He begins to appreciate the significance of such terms as *I, my, you, yours*. The world no longer belongs to him alone; some of it is his but the greater part belongs to others. Very gradually he acquires an appreciation of such things as individual rights, restrictions, limitations, and the like. Moreover, he comes to recognize the fact that most of the individuals around him are superior to him, that they know more than he does; that they are stronger and can do things which he cannot do. On the other hand, if he has a younger brother or sister, he comes gradually to appreciate the fact that it is more limited, more helpless than he; that he is indeed its superior.

With the development of self-consciousness, therefore, and with an appreciation of his own individuality, his separateness from others, the child acquires an ever-clearer understanding of his exact relationship to those about him. At one time his father induces fear in him, at another time anger, and over and over he is impressed with his father's greater strength, knowledge, and superiority in

general. These different emotions together with the cognitive elements resulting from his contact with his father become integrated into a larger mental disposition or sentiment. As time goes on, this sentiment becomes more clearly defined and determines to an increasing extent the exact nature of the child's reactions to his father under all the various situations of his home life.

But there is one sentiment in particular which has a far-reaching significance in the development of the individual. This sentiment has been termed by McDougall the *sentiment of self-regard*.<sup>10</sup> The essential factor underlying the development of this sentiment is the distinction which the child comes to make between self and not-self. Until such a distinction is made it is inconceivable that such a sentiment could develop. The innate dispositions most fundamental to the formation of the sentiment of self-regard are, we must assume, those of self-assertion and self-submission, since it seems quite clear that these two dispositions are those concerned most in the early reactions of the child to other persons. That the sentiment of self-regard cannot but have a far-reaching significance in the experience and behavior of the individual should be obvious from its very nature. For an aspect of it, clearly, is the particular estimate or evaluation which the individual places upon himself, the particular status he assigns to himself with respect to other persons. It is this sentiment also that makes the acquisition of social, moral, and ethical concepts and standards possible.

The sentiment of self-regard is different in certain fundamental respects from all other sentiments; it has two characteristic features, one of which other sentiments do not have. We have seen that a sentiment develops only when the cognitive aspects of two or more innate disposi-

<sup>10</sup> *Op. cit.*

tions are identical. In the case of the sentiment of self-regard this common aspect is the individual himself,<sup>11</sup> and as we have said, the two dispositions principally involved are those of self-assertion and self-submission. To this extent the sentiment of self-regard is not essentially different from any other sentiment. But there is a second aspect which is peculiar to it only. The sentiment of self-regard is the meeting point, so to speak, for all the other mental dispositions. This results from the individual's distinguishing between self and not-self; that is, he perceives his reactions (experiences) and his physical features as belonging to himself and this perceiving of self is the cognitive aspect of the sentiment of self-regard, and consequently with this perceiving of self the sentiment of self-regard is aroused. In many individuals the sentiment of self-regard is active almost constantly throughout the waking life, as shown by the fact that these individuals are self-conscious during practically the whole time.

From what we have said it follows that the sentiment of self-regard is the individual's measuring-rod not only of his own reactions but also of those of others. To illustrate: An individual becomes very angry because he is caught in a traffic jam. He immediately begins swearing at everything and everybody in general. Then something or other, perhaps a nudge from his wife, attracts his attention to himself; that is, he now perceives his swearing in relation to himself, and stops. The sentiment of self-regard has been aroused and its cognitive aspect at that particular moment is the perception of a swearing individual who is self. But such a picture of self does not harmonize with

<sup>11</sup> We mean by "himself," of course, the individual's own reactions, emotions, feelings, experiences in general, as perceived by himself and as belonging to himself either at the time or retrospectively. An individual may, for instance, sympathize with himself just as truly as he may sympathize with someone else. He does so when he perceives himself as mistreated or unfortunate.

those past pictures of self which have elicited praise and admiration in others and consequently pride, self-respect, self-esteem, etc., in the individual. In fact there may be an actual disharmony so marked as to arouse humiliation, a "feeling of littleness," which inhibits further swearing. At the same time a second individual might have sworn the louder upon having his attention called to himself. But he would have been one of those persons with an overdeveloped self-esteem and would have sworn the louder as a result of perceiving that it was *actually he* who was being hampered. Likewise the reactions of others elicit approval or disapproval in us only by virtue of the fact, and to the extent, that they tend to arouse our sentiment of self-regard. Hence it becomes clear that almost any mental disposition of the individual may be either compatible or incompatible with the sentiment of self-regard, depending, of course, upon the particular situation in which it is aroused. Justifiable anger becomes righteous indignation, unjustifiable anger is something to be ashamed of; sexual desire in one situation is entirely acceptable to the individual, being wholly compatible with his self-respect and self-esteem, while in another situation it may be so unacceptable as to lead to deep shame, self-reproach, and even self-loathing. Since every mental disposition of the individual necessarily comes into contact with the self-regarding sentiment, it is not difficult to conceive of the extremely great rôle which this sentiment plays in the integration and unification of the individual's mental aspects. Indeed, without it very little integration ever takes place, and with its loss there comes disintegration or dissociation.

We come now to the complete (or completed) mental individual, the personality. We have seen that the individual is not only an integration of aspects rather

than a mere sum-total of them but that we may distinguish different levels of integration. The lowest and simplest integrations are the innate dispositions. These dispositions become linked together to form a higher and more complex type of integration, the sentiments and the attitudes.<sup>12</sup> Finally, under the integrative and unifying influence of the sentiment of self-regard, these larger systems become combined to form a single very complex integration. Personality is frequently defined as the integration of the different mental aspects of the individual; that is, as this single very complex integration. But that we may keep before us the active and dynamic nature of mental life, we shall define personality as *the expression of the integration of the sum-total of the individual's mental aspects*. However, it must be pointed out that few if any of us ever reach the level of complete mental integration. Hence, personality, like nearly everything else, can be correctly viewed only as something which is relative, not absolute.

In giving this concept of the normal adult individual, which we largely owe to McDougall and Shand, we have endeavored to do nothing more than to formulate a basic concept which will enable us to understand, at least to some extent, the abnormal individual. Mental disorders are truly personality disorders, and the abnormal individual is one who presents either a one-sided or unbalanced personality or a partially disintegrated personality. In either case he differs from the normal individual only in degree. Hence the normal individual is really a conceptual abstraction rather than an actuality. The question always then is, not is this individual abnormal and this other one normal, but how abnormal (or how normal,

<sup>12</sup> The reader must bear in mind that a single innate disposition may belong to any conceivable number of different sentiments, that belonging to one does not preclude it from belonging to others.

it matters not which) is each of these individuals. However, in actual practice it becomes necessary, for the sake of brevity, to draw arbitrary lines and to speak of those on one side as normal and those on the other side as abnormal.

In the next chapter we shall discuss certain types of normal individuals.

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## CHAPTER III

### SOME DIFFERENT TYPES OF NORMAL INDIVIDUALS

**Introductory Remarks.** Mankind is classified, from various points of view, into different types or groups. Thus, one classification is based primarily upon skin color and certain other physical features, giving the five major divisions of the human race. Other classifications are based upon historic origin, nativity, etc. Now our immediate question is, and it is one of some importance both practical and theoretical, do we have any basis for a classification of normal individuals into types from a psychological point of view? Off-hand, we might be inclined to reply in the negative. But upon second thought, we should have to admit that different individuals react very differently, sometimes oppositely, to the same situation, that they think and feel differently about the same thing, that their likes and dislikes are very different. In fact, all our evidence goes to show that individuals differ as much psychologically as they do physically. Perhaps, then, there are adequate grounds for a psychological classification of normal individuals. But before considering this matter, it will doubly repay the reader to take note of the possible dangers inherent in classification in general and of human beings in particular.

**Possible Dangers in Classification.** It seems to be a proclivity of human nature to classify anything and everything. Man is uneasy in the presence of a phenomenon

which he is unable to classify, to place in a specific pigeon-hole of his system of knowledge. Mark the botanist who comes across a plant which he is unable to name. He will perhaps be all interest, and he may search through voluminous encyclopedias in an effort to identify his find. If he succeeds in classifying the plant, he then may or may not systematically investigate it, its mode of reproduction, its life-cycle, etc. And herein lies the chief danger in the classification of phenomena. Once a thing is classified, further interest and effort toward a thorough understanding of its exact nature tend to be blocked. Inform the student that an "idiot" is an individual who is greatly lacking in intelligence and the likelihood is that the student's "intellectual curiosity" will be satisfied, even though he has but an inadequate notion, or even no notion at all, of the nature of intelligence. Thus there is some proneness in man to confuse the act of labeling or classifying a phenomenon with a knowledge of the exact nature of the phenomenon. Where the classification is based upon relatively superficial aspects of the thing, more harm than good is likely to be the result. There is a legitimate place in science, or in any system of knowledge, for classification; but if it is to fulfill its proper function it must always follow, never precede, a fairly clear understanding of the phenomena to be classified.

A second abuse of classification is likely to result if purely relative phenomena are classified. It is permissible to devise and employ arbitrary methods of classifying relative phenomena provided it be kept clearly in mind that the sole justification of such a procedure is that of brevity. Presently, an example of such a classification will be considered.

It is not surprising that with the advent of psychology, numerous attempts were made to classify human beings

with respect to some one or several of their various mental aspects. But in this particular field classification has resulted in more harm than good—at least such is the opinion of many—and at the present time there is a marked reaction away from rigid psychological classification, particularly in the field of abnormal psychology. Still, it is probable that many such classifications have proved of little value because they were made in the light of insufficient data. A concrete example will make this clear. Many years ago attempts were made to classify individuals with respect to mental imagery. It was learned that some individuals seldom employ auditory imagery in their memory and thinking, while others employ it a great deal but are correspondingly deficient in the visual or kinesthetic or some other mode. The very significant fact that the majority of individuals use all kinds of imagery was largely overlooked or ignored and a classification which was both logically and psychologically misleading was constructed. Other similar classifications have been attempted on the basis of memory, thinking, intelligence, imagination, emotion, temperament, and various other aspects of man's mental make-up.

True, we still speak in terms of "types"—levels, groups, classes—but we invariably have in mind purely quantitative and not qualitative differences. Hence the terms idiot, imbecile, and moron are type-terms and are entirely permissible only as long as no absolute meaning is read into them, only as long as our use of these terms does not obscure the fact that such types or classes differ—so far as is known—solely in the matter of degree, and are separated from each other by wholly arbitrary lines. When used in this sense and with sufficient care not to obscure the fundamental fact of relativity, such classifications serve a very useful purpose, namely, that of

brevity. But brevity must always come second to clearness and accuracy, otherwise one loses by it more than he gains. Moreover, the student will find it is very easy to forget the fact of relativity (quantitative differences), particularly, it seems, in the study of psychology, and form the habit of serenely pigeonholing facts which cannot be pigeonholed, *i.e.* of drawing hard and fast lines of demarcation between relative phenomena, between which no such lines can be drawn. Such a practice not only leads to inaccurate thinking and faulty conclusions but, worse still, it dampens further interest and effort, for once a thing is classified, one's interest is, as we have said, likely to turn to something else.

Many of the possible bad results of hasty, unsupported classification are well illustrated by the history of abnormal psychology and of psychiatry, that branch of medicine which concerns itself with mental disorders. Not many hundred years ago the "insane" and the feeble-minded were believed to be under the influence of some supernatural agency, either God or the Devil. On this basis they were sharply distinguished (*i.e.* classified) from normal individuals. Later, science turned its attention to the problem of mental abnormality but for a long time sharp distinctions between the normal and abnormal were maintained on one basis or another. With interest in mental disorders becoming more marked, a veritable flood of different classifications of the same phenomena pervaded the "science" of psychiatry. The majority of the men who were studying and classifying—mostly classifying—mental disorders were physicians whose chief goal was always the cure of the patient. Now since in the realm of physical disorders it was not only customary but considered quite essential to diagnose (classify) the patient before attempting to cure him, the same reasoning and

practice were carried over to the problem of mental disorders. The result was that greater emphasis was placed upon the classification of the disorder than upon a study of its exact nature. Needless to say, such a state of confusion resulted that even the different investigators were scarcely able to understand each other's descriptions of mental disorders.

Another evil which resulted from this hasty classification of mental patients arose from the fact that patients were classified as "curable" and "incurable." Naturally the patient who was diagnosed (or prognosed) as an incurable received correspondingly little attention. This, of course, tended to inhibit further study of these patients. Even today this is by no means an unusual routine of procedure in many state mental hospitals; *i.e.* the patient is observed until the medical staff can agree, more or less, on a diagnosis and then, if he is diagnosed as a certain type of patient—more or less generally considered incurable—he is given little or no further attention.

This rather lengthy warning of the possible dangers inherent in classification in general, and in psychological classification in particular, should put the student on guard against a too ready acceptance of any of the various classifications which he will encounter in the literature on abnormal psychology. Also he should now be in a better position properly to evaluate the advantages offered by any concept of "psychological types." It has been pointed out that there is little if any reason for supposing that individuals can be psychologically separated and placed into fixed groups or classes, but it has also been suggested that wherever we have a quantitatively graded series we may legitimately break such a series up into as many arbitrary divisions as we wish. Thus, we may classify all men as either short, medium, or tall, and draw our

arbitrary distinctions between the different groups at any point (height) we desire. But if then we should forget that our distinctions between the three groups are purely relative and arbitrary, we shall have done ourselves much harm and no good. In short, there is no such thing as a tall individual; one individual is simply taller than another or, for that matter, than all others, but this does not make him tall in an absolute sense. Literally, "tall" is a concept dealing with an ultimate fact, something that is neither experienced nor conceived of by the average person. We use it in an arbitrary and relative sense to mean "taller than." The reader must keep this principle of relativity in mind in his study of psychology; and this will be more difficult than it perhaps seems.

**A Concept of Psychological Types.** Of the various concepts of psychological types which have been offered up to the present time, one in particular seems to have considerable promise, and to have a rather definite bearing upon the study of abnormal psychology. This is the concept of *introversion-extroversion*, developed and expounded by the European psychiatrist, C. G. Jung.<sup>1</sup> Using Jung's concept as a basis, the American psychologist Laird has constructed and at least partially standardized a personality test.

Introversion and extroversion, characterizing respectively the two extremes of the group, apply not to any single known aspect of personality but rather to what might be termed different (essentially opposite) modes of personality-expression. Perhaps it will assist the reader if we begin by saying that the introvert (the individual characterized by introversion) is "the man of thought," while the extrovert (the individual characterized by extroversion) is "the man of action," and then qualify and elaborate this statement as we proceed.

<sup>1</sup> Jung, C. G., *Psychological Types*. Harcourt, Brace.

All of us have among our friends and acquaintances individuals who are reticent, seclusive, appear to do a good deal of thinking, are inclined to be rather sensitive to the remarks of others, laugh but little, are not good "mixers." And among these individuals we know a few who appear to be quite extreme examples of this shut-in type of personality. These individuals we call *introverts*.

On the other hand, there are individuals among our acquaintances who are always on the go, very alert to what is happening about them, who laugh and talk a good deal, give free expression to their emotions and feelings, seldom appear embarrassed, are greatly interested in their surroundings and in other people, and are good social "mixers." Among these there are a few who appear to be extreme examples of this open, expressive type of personality. These individuals we call *extroverts*.

But we should hesitate to include the majority of our acquaintances with either of the above types; they appear to belong in between the two extremes. They constitute the more evenly balanced group. For these in-between individuals the term *ambiverts* has been suggested. Such a classification is similar to what we should have if we were to classify all individuals into three groups with respect to intelligence; one group being composed of those near and at the extreme of one end of the intelligence scale and termed feeble-minded, a second group consisting of those near and at the opposite extreme and termed unusually intelligent, and the third group consisting of those in-between and termed average or normal. Obviously there would be no sharp distinction between the three groups, but at the same time the two extreme groups would differ from each other to a very great extent.

The following list of "personality signs," as revealed

by the individual's actions will help to make clear the concept of introversion-extroversion.<sup>2</sup>

1. The introvert blushes easily; the extrovert rarely blushes.
2. The extrovert laughs more readily than the introvert.
3. The introvert is usually outspoken; the extrovert is usually careful not to hurt the feelings of others.
4. The extrovert is a fluent talker; the introvert can prepare a report in writing easier than he can tell it in conversation.
5. The extrovert loans money and possessions more readily than the introvert.
6. The extrovert moves more rapidly than the introvert in the routine actions of the day, such as walking, dressing, talking, etc.
7. The extrovert does not take particular care of his personal property, such as watches, clothes, etc.; the introvert is found continually oiling, polishing, and tinkering.
8. Introverts are usually reluctant about making friends with the opposite sex, while extroverts are attracted by them.
9. Introverts are easily embarrassed by having to be in front of a crowd.
10. The extrovert is a more natural public speaker.
11. The introvert likes to argue.
12. The introvert is slow about making friends.
13. The introvert re-writes his letters, inserts interlineations, adds a postscript, and corrects every mistake of the typist.

The list of "personality signs" which follows is revealed chiefly in the thinking and attitudes of the individual.

1. The introvert worries; the extrovert has scarcely a care in the world.
2. The feelings of the introvert are easily hurt; the extrovert is not bothered by what is said about him.
3. The introvert deliberates in great detail about everything—what to wear, where to eat, etc., and usually tells one why he decided to do what he did.

<sup>2</sup> Laird, D. A., "How Personalities Are Found in Industry," *Industrial Psychology*, Vol. I, No. 10.

4. The introvert rebels when ordered to do a thing; the extrovert accepts orders as a matter of course.
5. The introvert is urged to his best efforts by praise; the extrovert is not affected by praise.
6. The introvert is suspicious of the motives of others.
7. The introvert is usually radical in religion and politics; the extrovert—if he entertains any opinions—is usually conservative.
8. The introvert would rather struggle alone to solve a problem than ask for help.
9. The introvert would rather work alone in a room than with others.
10. Extroverts follow athletics; introverts, books and “high brow” magazines.
11. The introvert is a poor loser.
12. The introvert day-dreams a great deal.
13. The introvert prefers fine delicate work (die-making, accounting), while the extrovert prefers work in which details do not matter.
14. The introvert is inclined to be moody at times.
15. The introvert is very conscientious.

The foregoing characterizations of the introvert and the extrovert are to be understood as applying fully only to the more extreme cases. As has been said, the majority of individuals fall between these two extremes. Thus, whereas all individuals are more or less sensitive to personal remarks from others, some few are extremely “touchy” and we speak of them as being introverted in this respect, while a few others mind scarcely at all what others say about them and we speak of these as being extroverted. Again, a given individual may be strongly introverted with respect to a certain type of situation but otherwise typically extroverted, as in the case of the individual who is very sensitive and reticent regarding some personal feature, some hobby, some personal experience,

but is ordinarily very frank and sociable and tolerant of the remarks of others.

It will not seem strange that an extroverted individual should appear introverted in certain situations, and vice versa, if we keep in mind that extroversion (or introversion) is not to be thought of as a sum-total of specific traits but rather as a general mode of personality-expression. A very large individual may have unusually small hands or feet and still we should not hesitate to call him large. We would be using the term "large" to characterize the individual as a whole, as a unity, and consequently the term might or might not equally well apply to some specific aspect of the person. Similarly, when we speak of an individual as being introverted we are indicating his manner of expressing himself with regard to situations *in general* and not with respect to any one *specific kind of situation*.

We may approach the matter of introversion-extroversion from another angle and say that, in general, the introvert is more self-conscious, more conscious of himself, than is the extrovert. As was pointed out in the preceding chapter, the child must learn to distinguish itself from its surroundings. It must learn that its body, its feelings, desires, thoughts, in short, all its experiences, belong to it alone and that in certain fundamental respects they constitute a sphere which is distinct from the objective world. Like the puppy that bites its own tail and then yelps, so does the child fail to distinguish between self and not-self when it deliberately strikes its own foot with a stick. But as the child grows older, a clear distinction between self and not-self becomes established. Hence in any situation whatever there are two general directions which the attention and interest, that is, mental activity, may take. The attention of the individual may be directed primarily toward self—regardless of whether self at the moment is

more or less conceptual or is his physical appearance and actions—or it may be directed toward the objective aspects of the situation. Now any situation involving mental activity of an individual has, we may say, a reference point for such activity, the reference point being that aspect of the total situation with, or to, which the other aspects of the situation are related, or integrated. In the case of the introvert, self is the reference point, the measuring rod or criterion, in relation to which the other aspects of the situation are evaluated. The extrovert, on the other hand, takes some aspect of the objective situation as his reference point or criterion. Perhaps one or two examples will help to make this point clear.

It is a fact of universal observation that towering mountains, a raging sea, or a vast expanse of desert, ordinarily evoke an affective response in the individual who is viewing them for the first time. But the nature of the response in the more extreme introvert on the one hand and the extrovert on the other, is likely to be very different. The introvert will feel small, weak, and insignificant when gazing at lofty mountains for the first time. Not so with the extrovert; he will feel almost as great and impressive as the mountains themselves. Or they may appeal to the introvert as a haven of rest and security from a too harsh world; but the extrovert may look upon them as a challenge to his own powers, as something to be climbed, explored, and fitted to his own ends. In short, we have opposite types of reaction to the same situation. The introvert draws a hard and fast distinction between himself and the objective world, whereas the extrovert tends to identify himself with the latter. In the case of the introvert, self is the measuring rod, the criterion, which he applies to the world about him; the extrovert finds his criterion in the objective aspects of the situation. And so in the case of the moun-

tains, the introvert tends unconsciously (non-rationally) to compare himself with the mountains, while the extrovert tends to identify himself with them. The introvert loses by the situation whereas the extrovert gains, due to their respective attitudes. Essentially the same thing might be said with respect to the sea or the desert. The introvert feels small and insignificant simply because he distinguishes sharply between himself and the objective factors, while the extrovert "feels" himself into the situation and thereby partakes of its very nature.

The tendency of the introvert to compare himself to his environment is clearly seen in his response to other persons, particularly to strangers. His reaction to another individual whom he has not met before is always "subjective" or personal. He is uneasy until he has gained a fair notion of the other's worth. If he finds himself the loser by the comparison, then he will prefer to be away from rather than in the company of the other. This is not so in the case of the extrovert. If he regards the other individual as being his superior, so much the better since he readily identifies himself with the total situation and consequently enjoys what we sometimes term "reflected glory." The extrovert will enjoy sitting beside a returning Lindbergh during a parade in the latter's honor, while for the introvert such an experience might prove downright painful—he cannot forget his own relative insignificance, in the eyes of the admirers, in comparison with the other's significance. The extrovert is conscious of the situation as a whole, as a unity, while the introvert is far more conscious of the situation as consisting of two major aspects, the subjective or self and the objective or not-self.

What we have said regarding these two types of personality should be sufficient to enable the reader to distinguish between them to the extent that they are actually distin-

guishable. The chief interest in any concept of personality-types, from the standpoint of abnormal psychology, lies in whatever light such a concept may throw upon personality in general and upon the cause and nature of mental disorders in particular. It would be of considerable theoretical interest and of great practical importance if we were able to predict upon the basis of personality tests the kind of mental disorder any given individual is most prone to, and also the kind of work and general activity he should engage in in order to avoid mental troubles. And as we shall see later, there is already some evidence at hand to the effect that the introvert on the one hand and the extrovert on the other are prone to the development of rather different kinds of mental abnormalities. But as yet the systematic study of personality-types has only begun, and although it promises to be a very fruitful study in the future, the reader must not accept these largely conceptual and speculative interpretations as so many experimentally proved data.

To what extent introverted and extroverted personalities are matters of *inheritance*, and to what extent they are the result of *experience* and *training*, is an open question. Even though we were to assume with McDougall<sup>3</sup> and others that introversion-extroversion is primarily a matter of inheritance, it would not be necessary, therefore, to suppose that this aspect of personality is inflexible and not subject to alteration under the influence of the environment. Frequently there are both introverted and

<sup>3</sup> McDougall, Wm., *Outline of Abnormal Psychology*, p. 435. In the case of the two brothers which Professor McDougall cites and by means of which he very ably illustrates introversion-extroversion, he appears largely to have overlooked the age-factor in assuming a strictly similar environment in each instance. Since the two brothers are not twins it follows, of course, that one is older than the other. In the opinion of the present writer this factor of the difference in age between the two brothers may be of almost immeasurable significance in the development of their respective personality-trends. It would be interesting to know if the older of these two brothers is not also the more extroverted one.

extroverted individuals in the same family, despite the apparent absence of any strongly differentiating factor in the environment in which the different members have developed; and this lends some support to the view that it is essentially an inherited aspect of personality. At the same time it is very often possible to discover in the individual's past life various influences which would tend to predispose him either to introversion or extroversion, and this suggests the great rôle which environment may play in the development of personality. Quite often, for example, the individual who has been handicapped by some obvious physical defect (lameness, a missing limb, crossed eyes) is found to be very introverted, and the influence of this defect can be traced with unmistakable clearness throughout the development of his personality. Yet, since we find individuals who have had such defects from birth, or an early age, but who are nevertheless strongly extroverted, we must assume that a defect, real or imagined, is not the sole determinant in the development of an introverted personality. Of greater significance, perhaps, than either heredity or physical defects as such in the development of an introverted or extroverted personality, is the particular attitude taken toward the child by others, particularly adults. We are strongly of the opinion that this factor alone, if it is of a certain nature, is sufficient to determine the personality development of the individual along either introverted or extroverted lines. For instance, to speak in very general terms, if the attitude of others toward the child is such as to encourage considerable freedom of expression and to direct the child's attention to his environment rather than to himself, the personality of the latter will tend to develop in the direction of extroversion; while, if the attitude of others is such as to inhibit freedom of expression in the child and to direct his atten-

tion to himself rather than to his environment, he will develop in the direction of introversion. In either case the attitude of others is, of course, a factor of the child's environment and not his heredity.

Perhaps it is as near to the truth of the matter as we can get at the present time to suppose that a multitude of different factors, inherent and acquired, subjective and objective, combine to determine the particular trend which the development of the personality will take. If the individual is born with some physical defect but succeeds, with the help of others, in making an adequate adjustment early in life despite the defect, we should not expect the defect to play any great part in the development of the personality along either the lines of introversion or extroversion. But if the individual fails to make a suitable adaptation to his environment because of the defect, and if his attention is constantly being forced to it by the remarks and actions of others, we might expect the development of a seclusive, reticent, shut-in type of personality.

**Concluding Remarks.** We have been discussing introverts and extroverts very much as if they were distinctly different types of personality. Consequently, it may be well to call the reader's attention again to the point made at the beginning of our discussion, namely, to the fact that in speaking of introverts and extroverts we have in mind simply the extremes of the group when measured or gauged in terms of introversion-extroversion trends. Most individuals are neither typically introverted nor extroverted but fall between the two extremes. This means primarily that the average individual's reactions are neither strongly introverted nor strongly extroverted but are rather something of a compromise between these two extremes.

Nothing has been said of other attempts to get at per-

sonality-types. Among others, Jung <sup>4</sup> and Hinkle <sup>5</sup> have worked out more extensive classifications of personalities. Jung's classification is an expansion of his introversion-extroversion concept, and Hinkle's is very similar in many respects to that of Jung. The writer believes that these classifications have no particular value to the student who is just beginning a study of abnormal psychology. More recently Allport <sup>6</sup> has approached the study of personality from the standpoint of ascendance-submission trends in the individual's behavior. But it is too early yet to make any definite comments on the possible value of such a concept.

In leaving the present chapter we do not part company with introversion-extroversion. Other implications of the concept will be discussed and evaluated in connection with the material of the following chapters.

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## CHAPTER IV

### THE CONSCIOUS, SUBCONSCIOUS, COCONSCIOUS, AND UNCONSCIOUS

**The Conscious.** Some wise person has remarked that psychology first lost its soul, then it lost its mind, and now it is about to lose consciousness. And this witty but really meaningless remark has found a literal interpretation and application in the present behavioristic trend in psychology. Consequently, although it is of slight significance whether or not the reader is inclined to accept the behaviorist's platform, it is quite essential that he should clearly recognize the major issues involved in the present controversy concerning the whole matter of "consciousness." It is necessary, therefore, that we briefly consider certain of these issues before continuing with the subject-matter in which we are more specifically interested.

The *conscious* or *consciousness* is a concept, and like any other concept its validity must be measured in terms of its value to those who make use of it. Dunlap has repeatedly called attention to the fact that in any total situation involving what we call conscious experience or conscious reactions, there are three aspects which must be distinguished if one is to remain clear and consistent in his thinking: (a) There is that of which something is conscious; (b) there is the process or act of being conscious; and (c) there is that something which is conscious. In terms of stimulus-response psychology, the first is the stimulus, the second is the response, and the third is the

individual who makes the response. But, according to this psychology (of stimulus-response), the response is always conscious or near-conscious. Now precisely what is the necessity of adding this aspect of consciousness to the reaction? Why may we not speak only in terms of stimulus, response, and individual? For several reasons. In the first place, as we all know, it is frequently impossible to say, in the absence of any observable reaction, whether or not the individual perceives a given stimulus. And however much we may twist things around in order to make them fit a certain formula, we inevitably come back to the fact that when we ask the individual if he perceived the stimulus we are merely trying to learn whether or not he did consciously perceive it; that is, whether or not to his knowledge he perceived it. Secondly, an individual may respond to a stimulus and yet declare that he was not conscious of it, that he did not see, hear, smell, or perceive it in any other way. Now if an individual responds to a stimulus one time and declares he was not conscious of it, and responds to it another time in the same manner and says he was clearly conscious of it, there must be some difference of one kind or another between the two total situations. This difference can be described and understood adequately, we believe, only in terms of the concept of conscious reactions. Thirdly, there are instances in which an individual, in a certain but nevertheless very true sense, both consciously perceives and does not consciously perceive a given stimulus. This last fact makes it necessary not only to deal with the conscious aspect of reactions but also to distinguish between certain classes of reactions with respect to the nature of their conscious aspect. This will become clearer as we proceed.

Now let us return to the three aspects of any situation involving the conscious reactions of an individual. There

has been much controversy and speculation as to the exact nature of the something which is conscious. True, we might say it is the individual that is conscious, but to say that and leave it there would not mean very much. This something which is conscious is sometimes called the "I" or the "Ego." But what is the I or the Ego with respect to the mental constitution of the individual? We have said that from a psychological standpoint the individual is an integration of mental systems or parts, and that the pattern of the functioning of this integration is the personality. Now we shall identify the personality with the "I" or the "Ego." It behaves or manifests itself, so to speak, as a unitary something, as a single entity; it does this to the extent that it exists, to the extent that there is a true integration of mental systems. To the extent that an integration of these systems is lacking, to the same extent is personality lacking, with the result that the behavior of the individual is correspondingly of the all-or-none variety, spasmodic, inconsistent, wanting in uniformity, modifiability, and coördination. In other words, without an integration of the mental aspects of the individual there is no personality; the individual is simply a collection of unrelated parts, dispositions, or systems; now one, now another of which usurps the mechanisms of the individual, giving rise to that kind of disjointed behavior which we may observe in the small child or in the lower animal.

It is the personality, then, that is conscious; and the process or act whereby it becomes conscious of something (the stimulus) is termed a conscious process or conscious reaction. It is both useless and foolish to concern ourselves with the nature of consciousness as such. To be conscious of something is to be aware of it; to be aware of it is to be conscious of it; we cannot go any further. The act or proc-

ess of being conscious is as near to an ultimate fact as we ever get, and such facts can be neither described nor explained.

Since the time of Wundt the terms "conscious" and "mental" have been used in a practically synonymous sense in orthodox psychology. Of more recent years, however, with the growing interest and study of abnormal phenomena, the tendency has been to use the term "mental" in a general sense to characterize all psychological processes and events, but to limit the term "conscious" to those events and phenomena of which the individual is normally aware. We shall endeavor to make clear whatever justification exists for this recent trend in psychological terminology.

**The Subconscious.** Most psychologists who employ the concept of the "conscious" or "consciousness" conceive of it as being entirely relative, not absolute. That is, at any given moment one may be acutely conscious of something or he may be just barely conscious of it, or the particular degree of consciousness may be anywhere between these two extremes. We may compare it to vision. One sees most clearly that which is directly in the focus of vision (under ordinary conditions), whereas away from the focal point toward the periphery, things are correspondingly less distinct until the extreme margin is reached where objects are still vaguely seen but perhaps not perceived. The same thing seems to hold with respect to our conscious perceptions and reactions. One is reading an interesting passage in a book but at the same time he is vaguely conscious of certain sounds coming from the street. At another time he may be much more conscious of the sounds than of what he is reading. While walking in the park, deeply engrossed in some philosophical problem, you pass a man leading a dog. A few minutes later you

encounter a friend of yours with his child. You then vaguely recall having passed another man and "child." You were barely conscious of them and did not perceive them accurately. Such vaguely conscious perceptions or reactions are sometimes spoken of as being *subconscious*.

There is a second sense in which the term "subconscious" has been used. It has long been a recognized fact in psychology that a stimulus, which the individual does not consciously perceive as such, will, nevertheless, influence his reactions when it is acting together with other stimuli, *i.e.* when it is one element in a stimulus-complex. Thus, although an individual is unable to perceive any difference between two unequal weights, still when he is told that one is heavier than the other and is instructed to guess which is the heavier during a large number of trials, he will ordinarily guess correctly more frequently than he guesses incorrectly. Or, in another instance, he may meet some one who reminds him of a certain person whom he knows but still be unable to say what it is about the new acquaintance that reminds him of the other. Such cases as these are sometimes explained as being due to the "subconscious" perception of certain stimuli or factors in the situation of which the individual is not normally aware. A second explanation of this type of phenomenon which has been offered and which seems preferable is as follows. One may be absolutely unable to distinguish the several tones in a complex sound (such as orchestral music), yet it would be hardly correct to say that he therefore is not conscious of the different tones; he is conscious of them all together as a whole or unit, he is not conscious of them as so many separate entities. Now if we happen to be concerned with some one of the different entities or stimuli, then we find that the individual is not conscious of it as such; he is simply conscious of it as an

inseparable, indistinguishable, aspect of the whole; he is unable to distinguish the part from the whole, which is quite a different thing from not being conscious of it. Here, then, the term subconscious seems to have no legitimate place.

There is a third sense in which the term "subconscious" has been used and which, at the present time, is perhaps its most common usage. During the second half of the last century, two French physicians, Charcot and Janet, were engaged in the study of a certain class of mental patients, namely, hysterics. One fairly common symptom among a particular group of these patients was a restriction of the visual field. This amounted essentially to the same thing as the normal individual would experience were he to look through a pair of long binoculars, with the lenses removed, at near-by objects. His visual field would be reduced to a small circular area. Thus, when Janet tested the vision of his patients by moving some object from out on the periphery of the visual field toward the center, the patients would declare that they could not see the object until it was directly, or nearly, in the line of vision. Then one day he observed some of these same patients playing ball without the least apparent difficulty. It seemed impossible that one whose visual field was reduced almost to a mere focal point could succeed so well in catching a ball thrown toward him at different angles to his line of vision. In short, it seemed obvious that the visual field of these patients was larger than his tests had shown it to be.

Happily, for Janet and his work, he had a patient who always had a fit or went into convulsions upon being brought close to a flame (fire) and who had at the same time a restricted visual field. Although this patient declared he could not see an object held out near the margin

of his visual field, he immediately went into convulsions when a small flame was brought to a marginal point. This seemed to provide unmistakable evidence that the flame was perceived, although the patient declared that he had not seen it. Some of Janet's patients had anesthetic areas on their bodies. When such an area was touched and the patient was asked if he "felt" anything, he would reply in the negative, even though a sharp instrument were thrust into the skin. Then Janet discovered that, in the case of certain of his naïve subjects, if he requested the patient to say "No" when he did not "feel" anything and "Yes" when he did, the patient would say "No" whenever the anesthetic area was stimulated—the patient, of course, being blindfolded or otherwise kept from observing the experimenter's movements. This again proved that the stimulus was perceived. In short, then, these patients of Janet both did and did not perceive certain stimuli; they were both conscious and unconscious of the same thing at the same time. Janet explained this seemingly paradoxical phenomenon by assuming two more or less unrelated mental or conscious systems in the individual at the same time. Those perceptions and reactions which apparently belonged to the normal personality, he termed conscious, just as psychology had been doing; and those perceptions and reactions of which the individual declared himself to be unaware, he termed *subconscious*. That these processes or reactions which Janet termed subconscious are truly conscious (mental) in the same sense that the everyday experiences of the normal individual are conscious (or mental), has been well established by the later work of Janet and many others. We shall not at this point go into the nature of the evidence which has served to establish the above statement; suffice it to say that it is the same sort of evidence that leads us to conclude that the experiences and

reactions of others are conscious in the same sense that our own are.

It is apparent, therefore, that in connection with the observations and studies made by Janet, a new term was needed to designate certain mental phenomena found in mental patients. Whether the term chosen by him is the best and most truly descriptive of the phenomena concerned, is something which may be left for others to decide.

**The Coconscious.** Shortly following the early work of Janet in Paris, Morton Prince in this country was engaged in the study of similar mental phenomena. He discovered in certain of his patients (one or two in particular) what appeared to be two distinct personalities. One or the other of the two personalities was always in the ascendancy, so to speak, at any given time, but by means of various experiments and tests he was able to establish the fact of the existence of the two personalities at the same moment. Thus he was able to engage one personality in one kind of activity and at the same time engage the other personality in something else, the two activities being of such a nature as not to be explicable in terms of shifting attention or any of the usual concepts of normal psychology used to explain the doing of two things at once. If the individual were consciously engaged in reading, Dr. Prince could at the same time procure written answers to questions, written solutions to mathematical problems, etc., the subject being wholly ignorant of the fact that she had been writing or that any questions had been asked of her. For many other reasons he was led to conclude that in the same individual he was dealing with two personalities instead of one. In one case, personality X knew nothing of the existence of personality Y, except as she was told about her by Dr. Prince, while Y knew all about X—what she did, how she

felt, what she thought—she had a name for X and spoke and behaved very much as if X were another individual. Moreover, the two personalities manifested moods, sentiments, viewpoints, which were radically different.

Such phenomena as the above, together with a host of minor phenomena of the same general nature (such as are illustrated by automatic writing, crystal gazing, automatic speech, and many of the symptoms of mental patients), Prince has described or designated by the term *coconscious*. In short, he has found exactly the same kind of evidence of the co-existence of two or more integrated mental systems in certain individuals that we have of the existence of one such system in the normal individual.

There is nothing in these particular conclusions arrived at by Dr. Prince that is in any way inconsistent with the concept of mental integration and personality as we have outlined it in the previous chapters. If in the normal individual there is a gradual integration of all his various mental aspects—his innate dispositions, sentiments, attitudes, reactions—into a single system or organization, there is surely no *a priori* reason why these various aspects might not, under certain conditions and in certain individuals, become integrated or organized into two or more systems instead of one. We are further led to conclude that whenever a secondary integration becomes sufficiently complex and strongly motivated, there arises a secondary personality; or, to put it more accurately, to the extent that such a secondary system becomes complex and in the need of expression because of its basic innate dispositions, to the same extent do we have a secondary personality. In previous chapters we have endeavored to make clear that personality must be viewed in a relative and not in an absolute sense. Furthermore, it is easily conceivable that such a secondary mental integration might become

sufficiently complex and strong to usurp the mechanisms of the individual; in other words, to exchange places with the primary mental system and personality of the individual. In fact, this seems actually to have occurred, not only in certain of Prince's patients but in the case of a number of others reported by various investigators.

What, then, is the difference between the phenomena described by Prince and called *coconscious*, and those described by Janet and called *subconscious*? In general there seems to be no essential difference. Recognizing this fact, certain authorities have rejected the term "subconscious" in the sense in which Janet used it, contending that it should be used (if it is used at all) to designate those experiences and reactions possessing or involving only a marginal degree of consciousness, and that the term "coconscious" should be employed to designate all phenomena of the same general nature as those referred to above in connection with the studies of Janet and Prince. Perhaps the objections are well founded. If they are, it is unfortunate that the term "subconscious" has already found its way so deeply into psychological usage, in the sense in which Janet used it. However, it seems that the total group of phenomena such as we have been discussing might appropriately be divided into two smaller groups and a proper place be found for each term. The term "coconscious" does not suggest or imply any difference in degree; it makes no quantitative distinction between the two integrations or mental systems with which we are dealing in any given case. It implies that the two systems are co-existent, conscious (mental) integrations, and nothing more than this. The term "subconscious" implies a relative distinction, a difference in degree, between the two systems. It suggests that one is below, subordinate, or in some way inferior to the other. Now in certain cases of

"dual-consciousness," the two mental integrations are so nearly equal in strength and complexity as quite readily to exchange places, now one and now the other assuming the dominant position (becoming the conscious system or personality). In such cases, the term "coconscious" is most appropriate. But in the majority of cases one system is decidedly more simple, weaker, and inferior to the main mental integration. There may be no indication of a secondary personality. The secondary or subordinate mental integration may comprise a single sentiment, or a certain group of experiences together with a certain sentiment or innate disposition. In such cases the term "subconscious" seems preferable to the term "coconscious." Obviously there would be no sharp distinction between the two groups of phenomena designated by the respective terms.

To designate those experiences and reactions which involve only a marginal degree of consciousness, the term "marginal-conscious" or "semiconscious" might be used, and would, it seems, be more truly descriptive than the term "subconscious."

**The Unconscious.** The most widely current concept of the "unconscious" is that of Freud. That some writers use the terms "subconscious" and "unconscious" interchangeably must be due either to carelessness or to an inadequate comprehension of the true nature of these respective concepts; for the "unconscious" as conceived by Freud and the "subconscious" as conceived by Janet are about as different as two concepts pertaining to the same class of phenomena could well be. The concept of Janet is descriptive; that of Freud is explanatory. The one is describing experience and behavior; the other is explaining experience and behavior.

Perhaps the best approach to an understanding of the "unconscious" is by way of Freud's conception of mind.

He conceives of the mind as a tripartite division—the conscious, the foreconscious (or preconscious), and the unconscious. The conscious aspect of the mind is primarily a perceptual mechanism; a cross-section of it, so to speak, at any given moment would reveal those perceptions, thoughts, wishes, etc., which comprised the conscious processes at that particular time. Freud's notion of the conscious does not seem to differ radically from that of orthodox psychology except perhaps in the matter of its bearing upon, or relation to, the individual's behavior.

The foreconscious constitutes that great mass of data (experiences) which is readily accessible to the individual but of which he is not conscious at the moment. Thus, you may be able to tell me at once where you ate dinner yesterday, but you were not thinking about it (conscious of it) at the moment when I asked you. There is a continuous free and ready exchange of "material" between the conscious and the foreconscious throughout the individual's waking life.

The "unconscious" is a wholly different matter. According to Freud, the child is born with two fundamental urges, drives, or motivating principles. The one manifests itself in those various forms of activity which tend to satisfy the bodily needs of the individual, such as the need for food, drink, shelter, etc. The other urge, and the one of prime importance in so far as psychology is concerned, is that of sex. Very early in the life of the child the sex urge begins to manifest itself in definite overt manners. To begin with, the child's body is his own sexual object; he gets sexual pleasure and gratification from the stimulation of different parts of the body—the lips, the genitalia, the nipples—called *erogenous zones*. Following this auto-sexual stage, the child normally passes on to a bisexual stage during which, according to Freud, he is *polymor-*

*phous perverse*; that is, the child's sexual drive (libido) or energy may become directed or attached to practically any object whatever in his environment. Normally, the libido becomes attached to some member of his immediate family, usually one of the parents. But by the time the child has reached the age of four, five, six, or seven, his sexual trends begin to come into conflict with the socializing and moralizing influences imposed by others, and consequently the natural overt expression of his sexual urges is inhibited. As he grows older he develops moral notions and standards, apparently upon the basis of the *Ego instincts*, which now come into conflict with the sexual urges, desires, or *wishes*—which are being directed toward some member of the family—with the result that the latter (sexual desires) are repressed. Being repressed, they are no longer consciously perceived in their true nature. And it is for the most part these repressed sexual desires or wishes that make up the *unconscious*.

Now there are several fundamental points which the reader must grasp if he is to obtain a clear notion of Freud's concept of the unconscious. In the first place, it must be borne in mind that the sex urge or instinct is conceived as being truly dynamic in nature; it is a drive, a push, a motivating principle which normally expresses itself or finds an outlet in overt behavior. In the second place, it must be kept in mind that, to begin with, it is nothing more than a blind urge tending to manifest itself in certain ways, through certain mechanisms. Thus, as Freud has expressed it, the unconscious cannot think, it can only wish. It is only when the true significance of his acts and desires becomes apparent to the child that the desires are repressed; and it is only and exactly because they are incompatible with his developing moral principles and ideals (his developing sentiment of self-

regard, we might say) that they are repressed. But when repression occurs it involves something more than the original naked desire or urge; in being consciously perceived or recognized, the urge has become linked up with certain objects; it has been clothed, so to speak, in meaning or cognitive elements ("ideas" in the everyday meaning of the term). In short, a sentiment has become developed, and when repression takes place it is the whole sentiment and not merely its conative aspect that is repressed. Such a repressed sentiment is frequently termed a *complex*. To illustrate: The small child is sexually attracted to one of its parents. At first it is entirely frank in its manifestations and wholly unashamed of the pleasure which it derives from proximity with the parent. Gradually, due largely to the actions and instructions of others, it becomes conscious of the nature of its attraction and acts, or at least of the fact that others look upon such things with disfavor. The child thereupon tends to develop a feeling of guilt and shame with the result that the whole sentiment toward the parent involving sexual desire may become repressed. Such an unconscious, repressed, sexual longing for a parent, or any other object, would be a complex.

It is to be remembered finally that the repression of a desire, sentiment, or disposition does not in any sense eliminate it, according to Freud, except consciously. The urge is still there tending to motivate the individual toward its goal; and, failing to do this in a direct and natural manner because of the repressing agency, it takes some circuitous route, thereby reaching its goal by acceptable methods, or else it manifests itself in slips of the tongue and pen, in fantasy and dreams, or in mental symptoms.

Perhaps we should point out, before leaving Freud's concept of the unconscious, that he assumes several

natural modes of expression of the sex instinct; or, otherwise expressed, he contends that there are several components of the sex instinct. These components, which are arranged in pairs, become welded together, giving rise to the normal heterosexuality of the adult, if the individual develops properly and is not of an inherent *psychosexual constitution*. The principal components of the sex instinct are the tendency to examine or to inspect others, particularly when they are in the nude (inspectionism); the tendency to expose or exhibit one's self (exhibitionism); the deriving of sexual pleasure by inflicting pain upon another (sadism); and the act of deriving sexual pleasure through having pain inflicted upon one's self (masochism). Naturally (it is held by Freudians) any influence which tends to overdevelop or to overemphasize one of these components may result in a corresponding sexual perversion or abnormality.

Freud's theories have been severely criticised from various angles, but particularly because of the unduly great significance which he gives to sex as the chief dynamic principle back of behavior, both in the normal and the abnormal individual. That sex does play a fundamental part in the life and activity of every one of us, regardless of how cultured he may be, no one will deny; but that all the varied experiences and actions of the average individual—his worries, trials, fears, doubts, hopes, ambitions, pleasures, and his principal life-work—are related to sex, impresses most of us as being an unjustifiable extension of the true significance of one of man's several inherent aspects. As has already been pointed out, it is not surprising to find that sex is the chief etiological factor in mental disorders, since so many of our social customs and moral taboos hinge upon sex. It is inevitable because of this that the individual's sexual nature (sexual

urge) should frequently come into conflict with his moral values which are incorporated within his sentiment of self-regard.

A second line of criticism has been directed against Freud's division of "mind" into the conscious and the unconscious. Many psychologists contend that if an act, perception, thought, feeling, or any mental process is unconscious, it is not mental. In other words, they argue that a mental process is always a conscious process—although it may be of low intensity, possessing only a marginal degree of consciousness—and to speak of an unconscious mental process is an absurdity and a contradiction; that it has no more meaning than to speak literally of a rough smoothness, black light, or opaque transparency. But such arguments really mean very little and get one nowhere so far as an understanding of Freud's concepts go. Freud started out not to describe experience and behavior but to explain them. From his observations of behavior (particularly that of mental patients) he was led to postulate in the individual certain dynamic principles or urges which incline the individual to such behavior as will bring him to certain goals. Now these urges can become conscious only in the sense that the individual may be conscious of their manifestations in the form of thoughts, verbalized wishes or desires, overt activity, etc. In other words, a particular urge or direction of an urge becomes clothed by the individual's conscious perceptual experiences and behavior. If such experiences and behavior, therefore, prove incompatible with the moral values and self-interests of the person, the whole complex of perceptual and ideational experiences with which the urge has become incorporated, by means of which it has been manifesting itself, becomes repressed (unconscious). Since this urge can no longer manifest itself in the way in

which it had previously done, because of the repression, it must enter other channels of outlet, and in doing this it makes use, so to speak, of the thought and perceptual-systems (meanings) which have been repressed. This second aspect of the unconscious, *i.e.* repressed sentiments, experiences, etc., explains both the unconscious purposive behavior and the "meaningless" conscious behavior of mental patients, as well as dreams, slips of the tongue and pen, day-dreaming, and also much of the everyday behavior of the average individual. Consciousness, then, is only an accessory mental system—not the chief or sole one—the value and purpose of which is to adjust the individual to his immediate surroundings; it is a sort of go-between, with the unconscious on the one hand and the external world on the other.

The foregoing account of the basic concepts of Freudian psychology (better metapsychology) is very sketchy and the reader should endeavor to keep an open mind concerning its implications until he has become better acquainted both with Freudian doctrines and the particular mental phenomena to which they primarily relate.

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## CHAPTER V

### SOME COMMON MODES OF REACTION TO DIFFICULTIES

[TRIAL AND ERROR REACTIONS; PERSISTENT NON-  
ADJUSTIVE REACTIONS; REGRESSIVE REACTIONS]

**General Orientation.** In this and the next two chapters we shall discuss a number of different ways in which individuals react to difficulties. Hence it is necessary for the reader to know exactly what is meant by a difficulty and, in general, the relation of difficulties to mental disorders.

Mental disorders are currently classified into two large groups, *organic* and *functional*. In the case of the former there is known to exist along with the mental abnormalities some more or less specific organic disturbance, and it is quite generally assumed that the organic disturbance underlies, or is responsible for, the abnormal mental condition. For instance, it has been thoroughly established that in Dementia Paralytica (sometimes called paresis) there is a diffuse lesion of the cerebral cortex, and this lesion (destruction of tissue) is supposed to account, not for the exact nature of the mental abnormalities but for the existence of them. In this text we shall not take up this group of mental disorders, not because they are without interest for the student of psychology but because the scope of this book does not permit us to include them.

In the case of the functional disorders no organic disturbance which would in any way adequately account for them has ever been found. For other reasons also, which

will become clear as we proceed, it is quite generally assumed that here we are dealing not with any organic disturbance as such but rather with maladjustments of the individual to his environment. And when we carefully study the past life of an individual belonging to this class we frequently find that he has encountered some difficulty to which he has failed to make an adequate adjustment, and that his mental disorder may be properly viewed as a maladjustment to the difficulty. This brings us to the matter of the nature of difficulties.

A difficulty may be simply defined as anything that tends to block or thwart the expression of an urge. The reader will get the full significance of this statement only if he clearly recalls what we have said concerning the basic nature of the human individual; namely, that there are various urges or drives inherent within the individual and that the activity of the individual is but the expression or manifestation of these urges. Moreover, we have pointed out that an urge is of the nature of released energy, it is dynamic, and when once aroused it must manifest itself in some manner or other. It must be kept in mind, however, that the arousal of an urge is not an all-or-none process: an urge may be strongly aroused or only weakly aroused; one may be very angry or only slightly angry, or anywhere in between. But to the extent that the urge is aroused it must manifest itself. Finally, we should note the fact that some of man's urges are in an almost constant state of arousal, such as self-assertion, for instance, while others are aroused but infrequently, such as, for example, anger or fear.

We may distinguish three general classes of difficulties; that is, three ways in which an urge may be blocked. (1) An urge may be blocked by an *environmental obstacle*. Examples of this type of blocking are plentiful in our

present society. A policeman often constitutes an environmental obstacle which prevents some individual from reacting in a manner desirable to the individual but unacceptable to society. Any law which aims to restrict the activity of the individual for the good of the group may constitute in any given case such an obstacle. A locked door is an environmental obstacle from the point of view of the burglar who would enter the building. Society has long been accustomed to protect itself from vicious persons by imposing obstacles in the way of such persons. We do not believe, however, that the blocking of urges by environmental obstacles plays any very prominent rôle in the development of mental disorders.

(2) An urge may be blocked by some *personal defect or limitation*. A small crippled boy goes to a school where outdoor sports are stressed a great deal. The presence and activity of others arouse his self-assertive disposition which, if it could be adequately expressed in such a situation, would result in his competing with the other boys in the various sports. But his crippled condition makes it impossible to do this and consequently the urge is blocked. Again, a certain young woman is physically so unattractive that she fails to make any appeal whatever to members of the opposite sex. She is never invited out to dances, parties, or the theater; she enjoys no contact at all with boys or men. Various urges, therefore, among which is that of sex, are unable to gain expression in a normal and natural type of activity. The blocking of urges by personal limitations may, and frequently does, have far-reaching and disastrous results to the individual. We shall have a good deal to say throughout most of the following chapters about this type of blocking and its results.

(3) An urge may be blocked by a *second urge* which is *antagonistic* to it. A married man of high moral and ethi-

cal standards falls in love with another man's wife. His desire to declare his love to the other woman (that is, his sex urge) comes into conflict with his sentiment of self-regard, *i.e.* his self-esteem, his desire to be honest and fair to all concerned, etc., and is blocked. When two antagonistic urges are simultaneously aroused, the condition is technically known as a *mental conflict*, or simply as a conflict. This type of blocking of urges is perhaps by far the greatest primary source of mental disorders, of maladjustments to life-situations. But in the opinion of the writer only those cases of mental conflict in which the sentiment of self-regard is involved have any significance in the development of mental disorders. Considerable evidence in support of this view will be brought out in the following chapters.

The reader will observe that in distinguishing these three different ways in which an urge may be blocked we have considered them from the point of view of the individual. An environmental obstacle is such only as long as the individual perceives it as something objective. In many cases an individual may perceive his inability to realize a certain wish as being either an environmental obstacle over which he has no control or a matter of personal limitation or deficiency; and his subsequent reactions will depend largely upon which interpretation he makes of the situation. Where one urge is blocked by an antagonistic urge, the individual usually recognizes both factors of the conflict as belonging to himself, although even here he sometimes perceives one of the two factors as being external or objective to himself. Cases in point will be cited later.

Before taking up different modes of reaction to difficulties, let us again point out that a blocked urge always constitutes a difficulty and consequently may be spoken of as such. Also it is permissible to speak of a difficulty as a

difficult situation or as a baffling situation. Similarly we may use instead of the term *urge*, the terms *tendency* and *drive*; and instead of the term *blocked*, the terms *thwarted* and *baffled*. In any given case, whether we use the phrase *blocked urge* or the phrase *difficult situation* will primarily depend upon whether we wish to call attention to the fact of the *urge's* being blocked or to the situation which blocks it.

Our immediate question now is, what does the individual do when an *urge* is blocked, when he is confronted by a baffling situation. In this chapter we shall consider three general modes of reaction to baffling situations.

**Trial and Error Reactions.** Although the reader is presumably familiar with the characteristic principles of trial and error activity, it is not likely that he has definitely related it to the problems of abnormal psychology. We may begin by saying that it is undoubtedly the most universal type of truly adjustive activity found in relation to baffling situations. Thus it is observed in the lowest forms of animals, as is indicated by the following citation from Jennings.<sup>1</sup>

Let us suppose that as *Paramecium* swims forward in the way just described, it receives from in front a sample that acts as a stimulus, that is perhaps injurious. The ciliary current brings to its anterior end water that is hotter or colder than usual, or that contains some strong chemical in solution, or holds large solid bodies in suspension, or the infusorian strikes with its anterior end against a solid object. What is to be done?

*Paramecium* has a simple reaction method for meeting all such conditions. It first swims backward, at the same time necessarily reversing the ciliary current. It thus gets rid of the stimulating agent, itself backing out of the region where this agent is found, while it drives away the stimulus in its reversed

<sup>1</sup> Jennings, H. S., *Behavior of the Lower Organisms*, p. 47. Columbia University Press.

ciliary current. It then turns to one side and swims forward in a new direction. . . . The animal may thus avoid the stimulating agent. If, however, the new path leads again toward the region from which the stimulus comes, the animal reacts in the same way as at first, till it finally becomes directed elsewhere.

In short, we can say that if movement in a given direction (an urge) is blocked, even in the case of the unicellular animal, there is a tendency for the animal to resort to a series of random or trial and error reactions in an attempt to overcome or adjust itself to the situation.

A large part of the activity of the normal human individual, child or adult, which is concerned with adjustments to baffling situations, is of this same type. Observe the activity of the boy who has sighted a large red apple in the top-most branches of a tree. The sight of the apple has aroused an urge which would find its adequate consummation in the activity of gaining possession of, and eating, the apple. But the urge is temporarily blocked by the fact of the apple's being out of reach. Now, the type and the scope of the activity which follows will be the measure of the boy's capacity for adapting himself to this particular situation. Let us suppose that the boy sits down at the foot of the tree and cries. Such a reaction would not be of the true trial and error type nor, in this particular case, would it be an adjustive type of reaction. The urge finds its only expression in a nonadjustive kind of reaction which does not adapt the individual to the situation, which does not overcome the obstacle. The passer-by, recognizing the situation, would perhaps consider the child to be either "spoiled" or not very intelligent. Let us now suppose that a second boy, of the same age as the first, comes along and sees the apple. Instead of sitting down and crying, he endeavors to climb the tree. Failing at this, he finds a long stick and tries to

reach the apple, but again he fails. Now he tries to shake the tree and cause the apple to fall, but the tree is too heavy. Finally, he gathers some stones and succeeds in knocking the apple from the tree. He has succeeded in adapting himself to the situation, in overcoming the obstacle; the blocked urge now realizes itself in the most natural and satisfactory manner.

From the examples of the two boys and the one of the paramecium, we may point out certain significant facts. The first is that whereas the lower animal is wont, by virtue of its inherent organization, to resort to a more or less fixed or stereotyped series of trial reactions when confronted by a baffling situation, man is far less equipped by his inherent nature to respond in certain definite ways. Thus we often speak of the lower animals' reactions as being instinctive, while we speak of man's reactions as being of the trial and error type.<sup>2</sup> But to speak in this manner is to neglect the significant fact that we are dealing not with two general types of behavior but rather with two sets of directing or controlling factors back of the behavior. When confronted by a baffling situation the lower animal goes through a series of trial reactions, and every other member of his class, with very rare exceptions, is prone to go through the same series of trial reactions when confronted by the same or a similar situation. This fact, together with other facts, unmistakably indicates that the lower animal tends to resort to a certain set of reactions when confronted by a baffling situation and that his particular set of reactions is primarily determined by his inherent nature. In short, those controlling or directive factors which determine his own particular series of trial reactions are an aspect of his inherent constitution. Now the human individual, while he resorts just as much, and

<sup>2</sup> See, for instance, Woodworth, R. S., *Psychology*, pp. 111-112. Holt.

perhaps more, to trial reactions when confronted by a baffling situation, does so not so much in keeping with any inherent directing factor as in keeping with his past experience, *i.e.* his sentiments, attitudes (habits) and intelligence. This brings us to a second fact which we wish to point out.

Whereas the lower animal is limited, comparatively speaking, to a definite number of different reactions to a baffling situation, man is limited, in the number of different kinds of reactions he may make, only by his past experience and his intellectual capacity. Hence we see the true nature of the rôle which *intelligence* plays in the human individual's life; it points the way, so to speak, to different possible ways of meeting the situation. It has largely supplanted, in the human individual, the more fixed relationships which we find in the lower animal between situation and reaction. Thinking, used here in a broad sense to denote the various intellectual functions, is, of course, a matter of trial and error reactions. Therefore we may say, broadly speaking, that thinking, like overt behavior, is always in the service of desire (*urges*).

We may briefly summarize our comments on trial and error reactions by reëmphasizing the universal, fundamental, and normal nature of this type of reactions to baffling situations. Trial and error activity provides us with a sort of criterion for describing and estimating other general types of activity. In a very broad sense nearly all, if not all, types of reaction to baffling situations might be termed trial and error; but since it would be necessary to add qualifying terms in order to characterize adequately these other types, it seems best to distinguish them completely from the general type of activity which we have been discussing, and to use the terms which are in current use to designate them.

**Persistent Nonadjustive Reactions.** Unfortunately all human individuals do not resort to true trial and error activity upon encountering a baffling situation; neither their thinking—if any is present—nor their overt behavior is of this type. Let us return again to our example of the boy who cried because the apple was out of reach, and let us assume further that his crying continues for some time. Now since his crying is in a true sense a definite reaction to a baffling situation, we may describe it as a persistent, nonadjustive type of reaction. We might go a step further and designate it as a persistent, nonadjustive, affective reaction, to borrow an expression used by Hamilton.<sup>3</sup> Since persistent, nonadjustive reactions are fairly common in human individuals, particularly abnormal subjects, we shall be interested in determining in so far as possible the why and wherefore of such reactions. Is there anything in the inherent constitution of the individual which predisposes him to this type of reaction upon meeting a difficult situation? Or is such a reaction to be accounted for in terms of the individual's past experience? Since inherent nature comes before experience, we should examine it first; and as usual we shall turn to the lower animals for possible clues.

Hamilton made an interesting observation of twelve gophers, each placed in a separate nest in a single cage.<sup>4</sup> He noticed first of all that when any one of the gophers came out of its nest for food which had been placed in the center of the cage, it was quite as likely to enter one of the other nests as to return to its own. In such cases the intruder was ejected, provided the rightful occupant of the nest was the stronger. Whereupon the intruder, instead of

<sup>3</sup> Hamilton, G. V., "A Study of Perseverance Reactions in Primates and Rodents," *Behavior Monographs*, Vol. 3, No. 2. Also *Objective Psychopathology*, by the same author.

<sup>4</sup> *Ibid.*, first reference.

trying one of the other nests or going to its own, would again enter the nest from which it had been ejected. It would keep doing this until either it or the other gopher was exhausted or killed. Hamilton reports that within a few days only two male gophers, occupying nests at opposite ends of the cage, were still alive. Here we have a splendid example of the persistent, nonadjustive type of reaction. May we safely assume that this type of reaction to a baffling situation is a part of the gopher's native reaction-equipment to baffling situations? This seems to be Hamilton's interpretation, for which there appears to be no alternative.

Other animals are known to manifest this same type of behavior. The *domesticated hog* is a good example, as those know who have ever handled him. Thus we have the expression "As stubborn as a hog," "stubbornness" being nothing but a tendency to persist in one reaction to an extreme degree, even when the reaction proves to be nonadjustive. The sheep, too, is wont to persist in a given reaction, often beyond the shepherd's endurance—hence the value of the shepherd's dog, since by frightening the sheep its perseverance in a given reaction (direction) is broken down. Another example, and one that often amuses the small boy, is the cat's persistency in whining and scratching when pulled by its tail.

Persistent, nonadjustive reactions are quite common *in the child*. The little tot starts to leave the room but comes to a closed door. He grasps the handle and pushes and pulls and perhaps cries. He may continue making the same nonadjustive responses till the adult watching him from the next room wonders why the child doesn't try some other way of gaining his end. But we have already pointed out that the human individual is not well provided by his inherent nature with definite alternative modes of reacting

to baffling situations; and while this deficiency is more than compensated for in the adult by his superior intelligence, the child's intelligence is not yet developed and consequently alternative modes of reacting are not apprehended. Or we might say (in popular terminology) that there is no instinct in the child to point the way and that his intelligence is not yet sufficiently matured to do so; consequently the child persists in a simple type of reaction, which does not prove adjustive.

But we also find persistent, nonadjustive reactions to baffling situations *in adults* of normal or average intelligence. An example would be the case of the person who upon reaching his office discovers that he has forgotten his key. He knows the door will be locked, but nevertheless he tries it. Then he deliberates and tries it again, turns around and tries it once more, and starts back for his key; but after taking a few steps he returns and tries the door still another time. Or to take another example; a person is out riding and his car suddenly stops. He steps on the starter but it doesn't work. He frowns and steps on it again, but there is no response. He perhaps glances up and down the street and then steps on the starter a third time. He may try it a dozen times before he finally gets out and begins a systematic examination into the possible causes of the difficulty: *i.e.* before he resorts to a trial and error type of activity. These are comparatively mild cases of persistent, nonadjustive reactions in normal adult human individuals. Before considering cases which might be termed abnormal, it will be well to examine some of the possible explanations or causes of this type of reaction.

Perhaps the first explanation that would occur to us is that we are simply dealing with a predisposition in the human individual to react in a persistent manner to baffling (new) situations; that we are dealing with the same

kind of thing that we assumed to exist in the gopher. A moment's reflection will lend considerable weight to such an assumption. For we can see at once that without a certain amount of persistency or perseverance, true trial and error reactions could not exist, inasmuch as a certain degree of perseverance is usually necessary to an adequate testing of the value of a given reaction. This is particularly true whenever the success or failure of a certain reaction cannot be immediately determined, as in all cases where the strength and endurance of the individual are definitely involved. Hence in ordinary trial and error reactions we are apparently dealing with two predispositions, one of which is to relinquish one mode of reaction for another if the first does not immediately prove adjustive, and the other of which is to persevere in a single reaction. If these two predispositions are properly balanced, typical trial and error activity results; if the tendency to persist in a single reaction is greatly predominant, a persistent, non-adjustive type of reaction will follow, except in those cases where the first reaction proves adjustive; if the tendency to relinquish one reaction in favor of another is too much in evidence, a flighty, superficial type of activity takes place. Both the persistent, nonadjustive, and the flighty, superficial types may be so marked or exaggerated as to constitute truly abnormal reactions.

But although we might attach considerable importance to the explanation just given, we should not, therefore, ignore other possible causal factors, particularly since our primary interest is in understanding and explaining persistent, nonadjustive reactions in the human adult. For he is a very complex organism; and besides we know that many of his reactions are determined by a number of factors operating together. Now we have already pointed out that trial and error behavior in the adult is largely con-

ditioned by his intelligence; the greater his intelligence, the greater the number of alternative modes of reaction which will occur to him in a given baffling situation, other things being equal. It naturally follows from this that anything which tends to inhibit the intellectual or cognitive functions—recalling, perceiving, thinking, etc.—will necessarily limit trial and error reactions.

There are two facts of universal experience and observation that have a definite significance at this point. In the first place we are all cognizant of the inhibiting influence which strong feeling or emotion usually has upon thinking. This is a fact of everyday experience. Hence we hear such expressions as: "I was too frightened to think about it," "I was too excited to know what I was doing." The second fact, and one almost as common as the first, is that persistent, nonadjustive activity is usually accompanied by strong feeling or emotion. From these two facts we arrive at the conclusion that persistent, nonadjustive reactions in the human adult may be the result largely of emotional disturbances. This sheds additional light upon the true nature of persistent, nonadjustive activity; that is, such activity is predominantly of an affective, as contrasted with an intellectual, nature. In other words, *the directive agency* in persistent, nonadjustive reactions is the feelings and emotions instead of the thinking. We know that the initial reaction of an individual to a baffling situation may be either predominantly affective or it may be predominantly intellectual; in the former cases persistent, nonadjustive activity is likely to follow; in the latter case trial and error reactions will result.

Consequently we see that if the psychologist is to understand adequately and to be able to explain persistent, nonadjustive activity, he must first explore those processes of

which the activity is but an expression. His first objective will be to determine the nature of the affect which inhibits the intellectual functions. Having done this, his second task will be to discover why this particular affective reaction is made to such and such a situation. Needless to say, this always necessitates an investigation of the individual's past experience. Although this lies somewhat beyond the scope of our present interest, we may cite and briefly analyze, for the sake of greater clearness, one or two cases of abnormally persistent, nonadjustive activity.

A young man is told by his physician that he has a predisposition to tuberculosis of the lungs, that unless he is very particular about his health he is likely to contract this disease. He reacts with fear and anxiety and ends up by becoming very depressed and moody. Most of his talk has to do with his expected misfortune. Day after day he sits about the house, brooding and forecasting for himself the most disastrous consequences. Thus we have a case of persistent, nonadjustive affective reaction to a baffling situation.

A second case is that of a young man who reacts with great uneasiness and anxiety when in the presence of young women. It is not merely a matter of being bashful with him, as is the case with many young men. Rather, he is abnormally self-conscious and uneasy; if spoken to he is likely to stammer or perhaps not be able to speak at all. Since his reaction to this particular kind of situation is always of the same sort, we may characterize it as persistent, nonadjustive, affective.

In a preceding paragraph we said that a thorough understanding and explanation of any specific case of persistent, nonadjustive reaction always involves a study of the individual's past experience. It will suffice here to give a brief analysis of the second case only. This young man's mother

has a very strong, aggressive, and dominating personality. Her word has always been law in the home. He recalls numerous instances of being made to feel her strength and his own weakness. As he looks back over his past life she stands out as the most powerful, authoritative, and superior person in his experience. Thus he came to react to her with a certain degree of uneasiness and anxiety and she always made him feel weak and incompetent. Whenever a dispute arose between them, he was invariably the loser. Naturally he extended his reactions to womankind in general, just as the child who comes to fear a dog extends this reaction to all similar animals. His reaction to women at the present time is exactly what it has always been. In short, we might say that this young man developed a particular kind of sentiment toward women as a result of his childhood experiences and that this sentiment now determines his reactions to a great extent in all situations in which women are present.

We may summarize our statements concerning persistent, nonadjustive reactions as follows. (*a*) There appears to be a predisposition in the human individual to relinquish one type of reaction in favor of another if the first does not immediately prove successful in making an adjustment to a given baffling situation. (*b*) There appears to be a second predisposition in the individual which manifests itself as a tendency to persevere in a given reaction. (*c*) When the proper balance exists between these two predispositions, typical trial and error activity results, other things being equal. (*d*) Since trial and error activity in the adult human is largely dependent upon the cognitive or intellectual functions, anything which inhibits these functions will favor a persistent type of reaction. (*e*) Strong feeling and emotion have an inhibiting influence upon the cognitive functions. (*f*) Persistent, nonadjustive reactions

in the human adult are invariably of an affective nature. (g) From (e) and (f) it may be inferred that feeling and emotion are in part the determining factors back of persistent, nonadjustive activity. (h) In order to understand the full significance of any given example of persistent, nonadjustive activity, it is necessary to know, first, the nature of the affect involved and, secondly, to know what past experiences resulted in the development of the particular sentiment (or sentiments) of which this affect is, in part, the expression.

**Regressive Reactions.** A third general class of reactions to baffling situations, *i.e.* those which follow the thwarting of an urge, is commonly known as *regressive activity*. Morgan defines regression as “. . . the tendency to solve the problems of life by reverting to childhood.”<sup>5</sup> Wells states, “When a less important trend thus absorbs energy that, for the fullest life of the individual, should go to the furthering of fundamental trends, this is called *regression*.”<sup>6</sup> Pfister’s concept of regression is quite clearly stated as follows: “If inner or outer conflicts obstruct a trend, the course of mental energy is turned back. It is expressed in various other trends. This backward turning is called regression. It is always a reversion to the infantile; and it is either (topically) a representation of childish fancies, feelings, and strivings, or (functionally) a renewal of types of behavior which are adapted to an infantile stage of development.”<sup>7</sup>

These definitions, which are more or less similar, have a common implication; namely, that as the child matures he relinquishes sentiments, attitudes, and modes of re-

<sup>5</sup> Morgan, John J. B., *The Psychology of Abnormal People*, p. 507. Longmans, Green.

<sup>6</sup> Wells, Frederic Lyman, “Mental Regression; Its Conception and Types,” *Psychiat. Bull.*, Vol. 9, pp. 445-492.

<sup>7</sup> Pfister, Oskar, *Die psychanalytische Methode*.

acting for others which are more in keeping with his advancing age. In other words, as he grows older his sentiments and attitudes change and this change expresses itself in a corresponding change in his reactions. Let us briefly examine this implication.<sup>8</sup>

Early in life the child develops a certain sentiment toward his mother, and we are able to determine the nature of this sentiment by the child's reactions to his mother. Thus we observe that he reacts to her as to one who is superior to himself, one who is stronger, who knows more than he does, who can do many things which he cannot do. We also note that he reacts to her as to one who will protect him and take care of his welfare. He follows his mother about, gets upon her lap, and wants her to pet him. From these and many other reactions we are able to determine the nature of his mother sentiment; but it is not essential here that we should analyze it into its component aspects. Now if we take this same individual when he has reached manhood, we shall usually find that his sentiment—and consequently his reactions—toward his mother is quite different from what it was when he was a child. He no longer reacts to her as to one upon

<sup>8</sup> It is possible to distinguish two different types of regression. In one the individual returns to an earlier level of his own interests, habits, and reactions in general. An example would be the case of the adult individual who regresses to the age of three or four, again eats with a spoon, is interested only in toys and childish things, talks like a child, has a very limited vocabulary, etc. Such an individual simply appears to have forsaken his more lately acquired sentiments, attitudes, habits, and ways of reacting for those which were characteristic of him at an earlier age. In the other type of regression the individual substitutes for a given adjustive mode of reaction some mode which is less adjustive and more infantile but which, however, has never been characteristic of him during his previous life. An example of this type of regression would be the case of the individual who reaches manhood and marries without ever having masturbated, and then, upon the disruption of his marital relationship, seeks a sexual outlet in masturbatory practices. We would call his auto-erotic practice regressive because, first, it results in an inadequate adjustment to the individual's sexual problems and secondly, because typically it belongs to the age of adolescence rather than to maturity. But the two types of regression appear to be the same in principle and we shall, therefore, make no attempt to keep them separate in our discussion.

whom he is dependent; he does not now get upon her lap and coax her to rock him to sleep; there is nothing in his attitude that indicates that he thinks she knows more than he does. In fact, most of his reactions may be quite the opposite of what they were when he was a child; he may react to her now as to one who is in certain ways dependent upon him; instead of asking her to rock him to sleep he may make things comfortable for her so that she may sleep. Most, if not all, of his reactions to his mother are different from what they were; his sentiment toward his mother is by no means the same as it was. Now, if for any reason whatever he were to revert to those earlier reactions to his mother, giving up the ones more recently acquired, we should have a case of regression, a case of regressive activity.

Now since we all know that the adult's sentiments and attitudes toward the various aspects of his environment are not at all the same as those of the child, the implication contained in the definitions which we previously cited is quite sound; in some way or other the sentiments and attitudes of the child are discarded in favor of those of the adult. But now the question arises as to what becomes of the sentiments of childhood. Are they simply made-over or elaborated or changed into those of the adult? If this is true, then how is it possible to have regression, that is, a return to the earlier sentiments and modes of reacting?

Since we do have regression it necessarily follows that we cannot consider the adult sentiment simply as a childhood sentiment which has matured. At the same time, inasmuch as there is no sharp break between the childhood sentiment toward a certain aspect of the environment and the adult sentiment toward the same thing, we can hardly assume that we are dealing with two

distinct sentiments and, consequently, regression is not to be viewed merely as a revival of sentiments which have lain dormant. Let us first frankly admit our inability at the present time to give a wholly satisfactory explanation of this intricate and baffling problem of regression, and then by way of analogy—which is sometimes helpful—see if we cannot conceive of the phenomena of regression in some manner which will fit the facts and at the same time be in keeping with our concept of the individual as an organization of mental dispositions.

A tree appears first as a small plant, the life processes of which manifest themselves by sending out tiny shoots. After the tree has fairly matured there is little or no evidence of life except in the higher parts, the branches and leaves. The trunk of the tree is to all appearances dead. But now if the top of the tree is cut off the trunk will send out tiny shoots, which will grow into branches and eventually have buds and leaves. In short, the injury to the tree caused a revival of the earlier modes of expression of its life processes.<sup>9</sup> Without pursuing our analogy further, we may gather two facts; the trunk was not really dead since it later sent out shoots, and the trunk was absolutely essential to the growth of the branches and leaves. Now let us compare the first appearance of the tree with the early childhood sentiment. The little plant becomes the trunk, and later, other parts develop. The trunk remains essential to the growth of these later parts. These later parts, the branches and leaves, are analogous to the adult sentiment. If these later parts are destroyed, the trunk (the childhood sentiment) becomes revived, so to speak. But all are parts of a whole;

<sup>9</sup> This analogy is somewhat similar to that which McDougall makes, except that he speaks of the nervous system instead of the sentiment. See McDougall, Wm., "Four Cases of Regression in Soldiers," *Journal of Abnormal Psychology*, Vol. 15, 1920.

the later parts, however, being dependent upon those which developed earlier. Now we may speak in terms of the sentiment, keeping our analogy in mind. The childhood sentiment becomes the essence or the trunk or body of the adult sentiment. It is still alive and finds expression, not through the earlier but through more lately acquired forms. If it is kept from expressing itself through, or in, these later forms, it must express itself in a more direct manner, that is, in its earlier manner. Our analogy is not complete—but if it were it would not be an analogy. Perhaps it will help the reader if he will think of a sentiment as a mechanism, a relationship or organization of parts, through which certain urges find expression. If certain of these parts are destroyed or rendered useless, the urge must express itself only in accordance with the remaining parts.

Before going on to the consideration of cases of regressive reactions, we may insert a few remarks concerning a class of reactions which is likely to be mistaken for regressive activity, although they are quite a different sort of thing. The sentiment of the adult is the result of experience, plus, of course, his inherent dispositions. This means that any given sentiment in an adult individual is, we might say, a photograph of his past experience with respect to that aspect of his environment to which the sentiment relates. From this we infer that if there has been no experience in relation to a certain aspect of the environment, there will be no sentiment developed which is related to that aspect; and this in turn means that if the individual then comes into contact with that particular aspect of his environment, he will be without any controlling or directing agency over his behavior except those innate dispositions which the aspect arouses. Although it is not common to find individuals who have developed no sentiment toward the commoner aspects of their environment, it is

common to find individuals in whom the development of certain sentiments has been greatly inhibited by the negative influences of other individuals. Such persons upon reaching maturity are found to react in childish manners in regard to those aspects of the environment which have to do with these but partially developed sentiments. The most outstanding example of this type of activity is the childish reactions of many adults toward sex; they have a childhood sentiment toward it. But such reactions are not truly regressive reactions; the sentiment which conditions them has simply never developed beyond the infantile or childhood level. Other reactions of this sort are those of the "mamma's boy" type of young man. He has never got away from his early feeling of dependence upon his mother and consequently his reactions to her have remained those which were more or less characteristic of him as a child.

True regressive reactions are by no means uncommon among normal adults. The young woman's sweetheart does not come when she expects him and she weeps. Weeping in the adult is a regressive reaction; it is a type of reaction which normally belongs to childhood. The football player is angered and deliberately strikes his opponent. Such a reaction is also characteristic of the child but is not strictly normal in the adult. Fearing he is going to fail the examination, the student cheats. Cheating in order to overcome a difficult situation is not in keeping with the general level of adult reactions. The adult who stamps upon the stick which has tripped him is guilty of regressive behavior. Many of the pranks of college students, such as clipping hair, locking each other up, tearing each other's clothes, etc., are of a regressive nature. Bathing, dressing, and fondling poodle dogs is regressive, sometimes abnormally so.

*Thinking* as well as *overt behavior* may be regressive. Common examples are dwelling upon one's childhood days,

thinking up false tales with which to impress others, entertaining thoughts of suicide as a means of taking revenge upon those who have given offense, etc. In general, day-dreaming (autistic thinking) may be considered as regressive.

When regressive activity is prolonged and the individual is unable to return to those levels of reaction from which he has reverted, we usually speak of his activity as abnormal. One or two examples of abnormal regression will help to make this clear.

CASE 1. A young girl was in love and was very anxious to marry. The young man she loved was not ready to marry. He wanted to run around and have what he considered a good time for a while before he settled down. This led the girl to fear the consequences of marriage with such a carefree youth and, aided by the disapproval of her fiancé expressed by her relatives and friends, she tried to decide that she would stay single. Yet she could not bear the thought of remaining single indefinitely. She was in a strange dilemma; she wanted to marry and she was afraid to do so. This led to the wish that she did not have any of the tendencies toward love life. If she were only a child again she would not want to marry and the trouble would be at an end. So she tried again to be a young innocent girl who knew nothing of love. She took the same attitude toward the whole affair that she would have taken when she was a pre-adolescent girl, and she seemed to get satisfaction from this for a time. When this satisfaction did not continue, her physiological maturity eventually forcing her to recognize that she was a woman, she attempted to commit suicide. After gaining insight into what she was doing, the girl adjusted her attitude, took a forward view instead of wishing to revert to a childish stage, and has made a satisfactory adjustment ever since.<sup>10</sup>

The next case of regression is an adaptation of a case report by Nicoll.<sup>11</sup> It is much more extreme than the one just given.

<sup>10</sup> Morgan, John J. B., *The Psychology of the Unadjusted School Child*, pp. 145-146. Macmillan.

<sup>11</sup> Nicoll, Maurice, "Regression," in Miller, H. Crichton, *Functional Nerve Disease*, pp. 102-105. Oxford.

CASE 2. An officer of twenty after being taken prisoner under somewhat doubtful circumstances escaped and was interned. Soon after, there occurred a gradual loss of sight, hearing, and speech, the regression continuing till these functions were lost. Both arms and both legs also were affected; but he soon recovered the use of his right arm. The regressive movement continued till he was psychologically about twelve years old. After remaining stagnant for some time at this level, there was a further regression to the age (psychological) of five. "He called the servants by the names which had belonged to servants who had been in the house when he was five. He called his young sister by the name of his eldest sister, etc. His speech was infantile. He lisped and used phrases and recalled incidents that his mother remembered only with difficulty. He remained at this level of regression for about two weeks." Following this period the patient gradually regained his sight, hearing, and speech and he "grew up" to about the age of seventeen; but his left arm and legs were still paralyzed.

These two cases will serve to give the reader some notion of abnormal regression. Other cases will be given in a later chapter.

It will be understood from what has been said that regressive activity may also be persistent, nonadjustive activity, or vice versa. The reader must not let this fact confuse him. Although our fundamental criterion when studying the activity of an individual is its adjustive value, we may, nevertheless, consider any given reaction or unit of activity from various secondary points of view; and when we do this we find that we may classify reactions, or activity, into different types or modes.

In the next two chapters we shall continue our discussion of the various modes of reaction which follow the thwarting of urges; *i.e.* which are made to baffling situations.

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## CHAPTER VI

### SOME COMMON MODES OF REACTION TO DIFFICULTIES (*Cont.*)

#### [COMPENSATORY REACTIONS]

**General Orientation.** In the last chapter we distinguished three general ways in which an urge may be blocked (three general types of baffling situations or difficulties), and we discussed three common modes of reaction to difficulties. The different types of reaction which we discussed are made for the most part to that class of difficulties which consists of the blocking of an urge by an environmental obstacle. In the present chapter we shall discuss a fourth type of reaction to difficulties but here we shall be concerned with a class of reactions which typically occur not upon the individual's encountering an environmental obstacle but upon an urge's being blocked by a personal deficiency or limitation. The reader must not infer from this that trial and error reactions, persistent nonadjustive reactions, and regressive reactions are limited solely to those instances in which the individual encounters an environmental obstacle, or that the type of reaction to be considered in this chapter occurs only when an urge is blocked by a personal limitation; for this is true only in a general sense and then only if we are careful to limit these different concepts (types of reaction) to a fairly narrow range of activity. Obviously we could extend the concept of persistent nonadjustive reactions to include regressive reactions, and vice versa, but then

the concept would be too broad to be of any real value in describing and understanding human activity. The sole justification for introducing two or more concepts instead of one is the fact that certain reactions can be more adequately described, understood, and dealt with when considered from one point of view than when considered from another.

**Compensatory Reactions Defined.** There is perhaps no chapter of modern psychology that is wider in its scope and more complex in its content than that of compensatory activity. Indeed, some writers appear to extend the concept of compensation to include nearly all thinking as well as much of the individual's overt activity.<sup>1</sup> But when used in this extremely broad sense, the concept loses most of its value as a help to the describing and understanding of the individual's reactions. Consequently in the present text we shall use the term "compensate" and its derivatives in a more restricted sense, in keeping with the following definition.

*When an individual, failing to adjust himself properly to a difficulty, reacts to his failure as to a personal deficiency and endeavors to make up for it by activity in another direction, we may properly speak of compensatory activity.* One individual might view his failure in a given undertaking as a result of environmental obstacles, while a second individual might view a similar failure in himself as a result of personal limitation. We would not speak of activity in a new direction as compensatory in the case of the first person. We would speak of a new line of activity in the second individual as compensatory provided it was clear that the feeling of deficiency which resulted from his lack of success in the first undertaking was in part the motivator of his

<sup>1</sup> See, for instance, Robinson, Edward Stevens, "A Concept of Compensation and Its Psychological Setting," *Journal of Abnormal Psychology*, Vol. 17, pp. 383-394.

subsequent activity. From this it will be seen that one is unable to say offhand whether or not a given bit of activity is compensatory in nature; it is always necessary to know the reason for the activity. It should also be evident from what we have said that almost any conceivable reaction might be, in a given case, compensatory. There are, however, many fairly common examples of activity which are almost always compensatory in nature. Some of these would be the development of an unusually strong voice in the exceptionally small man; the one-legged man's development of powerful arms and chest; the unattractive girl's frequently voiced indifference to styles in dress; the timid person's assumption of a bold demeanor; and the spinster's attention to her cat or lap-dog.

But why does the individual compensate? Even though he does recognize, or think he recognizes, a deficiency in himself with respect to one type of activity, why does this recognition result in a greater effort to prove his efficiency in some other line of activity? In Chapter II we said that one of the strongest dispositions in the individual is self-assertion; that every one naturally desires to be superior and strives to prove his superiority both to himself and to those around him. This urge tends to bring the individual into competitive activity with others; and, incidentally, he gradually acquires an estimate or knowledge of his capacities and his limitations largely as a result of his competitive relationships. Now if he competes with others and fails, he may view his failure either as the result of environmental obstacles or as a result of personal deficiency. In case of the latter there comes with his failure a feeling of inadequacy, of inferiority, which, by virtue of the individual's inherent nature, is highly disagreeable, perhaps even painful. This feeling of inferiority might then readily become an additional incentive to success in

some other line of activity, and we should speak of this second activity as compensatory, recognizing that the individual now has a double motive: namely, to regain his self-esteem and the esteem of others and to further this esteem.

We also pointed out in Chapter II that the individual's estimate of himself is one of the significant aspects of that mental disposition which is called the sentiment of self-regard. Consequently it follows, since one compensates only in order to attain superiority in the eyes of others or of one's self or both, that compensatory activity is always bound up with, or a manifestation of, the sentiment of self-regard. And the sentiment of self-regard, it will be remembered, is in part the individual's evaluation of self in relation to, or in comparison with, other individuals. Hence, as the reader can see, compensation is a type of activity which results from the fact of one's being a social individual. From this it follows that we should not expect to find compensatory activity in the lower animals or in the very young child.<sup>2</sup>

In a previous paragraph we spoke of an individual's compensating for failure in one type of activity by going into another type of activity. Now we might also view this as a matter of his compensating for the deficiency or limitation in himself which led to his failure in the first activity. The latter is not only the more psychological way of viewing the matter but, as will become clear later, it is much the better way of viewing it. *We may, therefore, now think of compensatory activity as a mode of reacting to, or as a general way of making up for, personal deficiencies or limitations, either imagined or real.*

Early in life the individual is greatly handicapped in his adjustments to his environment by the fact of his

<sup>2</sup> Possibly certain of the infra-human primates show some compensatory activity.

physical weakness and lack of experience and intelligence. Moreover, he finds himself surrounded by adults who are greatly superior to himself in every way. If he seriously endeavors to compete with them, his incompetency is necessarily brought forcibly to his attention. In addition to these facts is the further one of the child's complete inability to appreciate fully the fact that he must give himself time to mature, that he is deficient not in potential capacity but rather in the matter of development. And since the child does not fully appreciate the true nature of his handicap in competing with older children and adults, it is very easy to make him feel incompetent or inferior to others. Under fairly suitable conditions these feelings of inferiority are likely to be merely transitory and to disappear as the individual becomes, with his increasing age, more competent to meet the problems of his environment. But, on the other hand, if the child is too frequently made to feel his inferiority and is made to feel it too keenly, this feeling of incompetency may become so strongly incorporated into his sentiment of self-regard as to resist almost entirely the influence of his actual increasing competency. In short, *if an individual is made to feel inferior in comparison to others, when a child, and is made to feel this strongly and frequently, he is likely to carry this feeling with him throughout life.* Such an individual is said to have an "inferiority complex," to use a term suggested by Adler.<sup>3</sup>

Adler formerly contended that the inferiority complex was always developed as a result of some organic inferiority, imagined or real, but it has become quite well established that the real factor in the genesis of an inferiority complex derives not so much from a real or imagined physical defect as it does from the attitude taken by others

<sup>3</sup> Adler, Alfred, *The Neurotic Constitution*, Moffat, Yard. Or *Organ Inferiority and Its Psychological Compensation*, Nervous and Mental Disease Pub. Co.

toward the individual. Given the brightest and most perfect child in the world, it is possible to make him feel thoroughly worthless. In fact, in order that he shall grow up with a feeling of dependency upon someone else (a lack of self-confidence in himself), it is often only necessary to keep the child from endeavoring to meet his own problems as they arise, to teach him to be dependent upon someone else for gaining his ends. A case clearly illustrating this was recently brought to the writer's attention. A woman brought her little girl of six to the writer for the correction of a habit of vomiting which the child had developed in connection with going to school. In brief, every time the mother would take the child to school and leave her, the child would vomit. Thereupon the teacher would phone the mother who would immediately call for the child and take her home. Things became worse. The child got so she would vomit every morning at the very mention of going to school. The mother would then tell her that she need not go to school. The facts brought out clearly showed that the child was unduly dependent upon her mother; only in the presence of the mother did she feel safe and self-confident. All the factors which had contributed to the development of this feeling of inadequacy and insecurity were perhaps not discovered; suffice it to say that in general it was the mother's attitude which was at the root of the trouble. For instance, during one of the talks the mother openly deplored the fact that the little girl's face was generously supplied with freckles, and that her skin was not clear and smooth like that of certain other little girls. She also lamented the fact that her child had red hair. Such an attitude, such comments, could, of course, have but one effect upon the child, namely, to make her feel that she was not what she should be, that she was inferior to other children.

It requires no stretch of the imagination to conceive of the development of a strong inferiority complex in any case which is similar to the one just described. And needless to say, once such a complex (mental disposition) is developed, it is going to lead to compensatory activity, to an attempt to conceal or to make up for the deficiencies which have given rise to it. Now it may seem that as such an individual grows older and comes to recognize the fact that freckles and red hair are not only rather inconsequential details of one's physical make-up but that they are actually admired by many, the feeling of inferiority will naturally disappear. This, however, is not the case. If it were, sentiments would not be the very stable organizations that they are. An inferiority complex is an aspect of the sentiment of self-regard and as such it exerts a strong and very definite directing influence over the individual's reactions in all situations to which it is related. A feeling of inferiority in any given situation is, of course, itself a reaction to that situation. Now if it results from a failure to adjust properly to the situation at the moment, it may have no great significance other than to incline the individual to try again to meet the situation or else to make up for his failure in some other direction. In other words, if a given feeling of inferiority is the result of an individual's having tried and failed at the time to adjust to a certain situation, then the feeling of inferiority becomes the end-reaction at the time to that particular situation. But if the individual has already failed many times to adjust properly to a certain type of situation, and, as a result of his failures, has developed an inferiority complex, then *his very first reaction to such a situation will now be a feeling of inferiority*. That is, his feeling of inferiority in this case will result not from trying the situation at the time and failing, but from an established disposition or

mental organization which prompts the feeling of inferiority as soon as the situation is encountered.

What we have just said should make clear the real significance of the inferiority complex in relation to compensatory activity and in relation to feelings of inferiority. The reader should keep in mind the fact that a feeling of inferiority may come about, so to speak, in either of two ways. First, if the individual attacks a given situation and fails, he is likely to experience a feeling of inferiority to some extent. Thus a feeling of inferiority may result directly from failure in a given situation. Secondly, a feeling of inferiority may result not from failure to meet a situation at the time but rather from the existence of an inferiority complex in relation to the situation in connection with which the feeling of inferiority is experienced. It should now be apparent that an inferiority complex tends to keep the individual from really trying to meet certain situations since, due to it, a feeling of inferiority or inadequacy is the first reaction made to these situations. Also it should be apparent that an individual can have but little if any control over feelings of inferiority which are primarily due to an inferiority complex, inasmuch as a feeling of inferiority is the first reaction made to those situations to which the inferiority complex is related and consequently modifies and directs his subsequent reactions to them.

We are now in a position to amplify somewhat our previous definition of compensatory activity. *We can say that whenever a feeling of inferiority or inadequacy with respect to one type of situation or activity is instrumental in causing the individual to engage in some other type of activity, we are dealing with a case of compensatory activity.* We see, therefore, that if an individual develops a strong inferiority complex with respect to certain situations when a child, this may keep him from ever competing with others in

similar situations when he becomes an adult. Instead he may cast about for some type of activity in which he will meet with but little if any competition and try to win esteem and recognition by achieving success in this. Thus we may find him sitting on top of a telephone pole in the cold of winter;<sup>4</sup> or, if the individual is a woman, she may make a bid for attention by parading through deep snow in midwinter with nothing on but a bathing suit, provided, of course, she has a newspaper photographer present to record her feat. An unknown woodsman recently cut off the top of a tall tree, thereby gaining for himself a pedestal and the notice of others. Various daily newspapers printed a picture of him sitting on top of the tree. Shaw caustically remarks that he who can't, teaches.

We have said that the individual tends to compensate when there is aroused in him a feeling of inadequacy or inferiority. We shall now indicate some of the commoner factors which frequently lead to such a feeling and, therefore, to compensatory activity.

**Some Factors Leading to Compensatory Activity.** *Any physical defect, imagined or real*, may lead directly to compensatory activity or it may prove instrumental in the development of an inferiority complex and thus lead indirectly to it. A fairly common type of physical defect and one that almost invariably leads to activity of this sort is strabismus (cross-eyedness). If the condition exists early in life, a strong inferiority complex is almost certain to develop. The particular direction which the compensatory activity will take is problematical, but undoubtedly depends largely upon early environmental factors, such as the attitude taken toward the defect by the individual's family, the extent to which the individual is incapacitated

<sup>4</sup> Quite recently an individual attracted considerable attention by a "stunt" of this sort.

by the defect in his play and work, etc. An under-sized body often leads to compensatory activity, particularly in boys and men. Not infrequently the very small man will be found to have a very big voice which, in part, compensates him for his small physique in attracting the attention of others. Deformed or missing limbs, an unattractive face or figure, red hair, freckles, and in fact any other aspect of one's physical make-up, may amount to a personal defect or limitation if the individual concerned looks upon it as being so.

*Any mental defect* may lead to compensatory activity. If the individual has a poor memory or is unusually slow in thinking, he is likely to endeavor to make up for this in some way or other. Thus one individual who has an admittedly very poor memory for relatively isolated facts, is quite frank in declaring that he nevertheless is an exceptionally clear and logical thinker, and takes advantage of every occasion to demonstrate the truth of what he says. Or the student who plans to major in mathematics may discover that he is a bit backward in this field of study, and instead of working harder to overcome his deficiency he may change to dramatic art or to some other course.

*An inferior social status* may lead to compensation. Of course the degree to which the individual will tend to compensate for his inferior social position will depend largely upon the value attached to social prestige by the group to which he belongs. Mothers who are eager for a better social standing are frequently inclined to encourage their daughters to choose mates from their social superiors. Or the daughter herself desirous of greater social prestige may marry a certain one of her suitors for no other reason than that he promises, more than the others, a higher degree of social superiority. The bartering of wealth for social

position by way of marriage is of course quite common in our present society. On the other hand the individual frequently seeks social prestige by aligning himself with a group who are his inferiors. He thus becomes, with respect to the people with whom he associates, socially superior. In other words, from the standpoint of some, it is better to be a big frog in a little pond than a little frog in a big pond.

*An inferior economic status* may likewise lead to compensatory activity. A common way of compensating for this type of deficiency is "to put on a front." Thus an expensive car and an apartment on Fifth Avenue are taken by others as an indication of a fairly high economic status, although the individual in possession of them may actually own neither. Some individuals dress beyond their means, others entertain beyond their means, while still others send their children to very expensive schools when they can ill afford to do so.

There are, of course, many other factors which often lead to compensatory activity, such as, to mention only a few, racial features, illegitimate birth, disappointment in love, sexual impotency, financial failure, the loss of a child. But those which have been mentioned will suffice to give the reader some insight into this aspect of compensation and we may now consider certain of the more common forms which compensatory activity takes.

**Forms of Compensatory Activity.** Many writers distinguish a certain type of activity which they call *over-compensation*. This type of activity results not from the re-directing of a blocked urge into other channels of expression but in the over-intensification of the urge along its initial channel. In other words, over-compensation is nothing more or less than the exaggeration or intensification of a direct and perfectly normal and adjustive type

of reaction to a difficulty. Consequently a better term for it, and the one we shall use, is *over-reaction*. An example of this type of activity would be the case of the young woman who, upon entering college, was told that she had very weak lungs, which, it was explained, predisposed her to tuberculosis. She immediately undertook to develop her lungs by means of a system of exercises, which she continued until she had the greatest chest expansion of any girl in her class. Another girl, if faced by such a difficulty, might conceivably have reacted in a totally different manner; for instance, by sitting around and talking a great deal about her misfortune or by secluding herself and day-dreaming of what she might have been and done. Another example of over-reaction is that of a case cited by Vaughan.<sup>5</sup>

CASE 3. Let me illustrate how inferiority was compensated through athletic accomplishment in the life of Gene Neely. He was a listless young man until a shotgun wound deprived him of one arm. This "crippling accident did a strange and great thing for Gene Neely. It gave Gene Neely a cause. It seemed . . . to charge him with a burning mission to prove to the world that a man with one arm can do anything that a man with two arms can do. But for that misfortune, it is quite probable that he would merely have been a good-natured fat man on cordial terms with the world, an easy-going individual with no particular drive nor dash to him. . . . But as it was Neely became a sort of flaming crusader in the cause of the maimed. There was edge and bite and fire and fury to him. There was a constant challenge in his steel-gray eyes, a seething unrest in his powerful limbs. He measured every man—his power, his skill—and as he measured him, he prepared to fight him. 'He thinks he's good because he's got two arms,' he used to confide, . . . 'but I can lick him the best day he ever saw. . . .'" He was perhaps the most remarkable athlete in intercollegiate annals. "He made the All-America team in football, played a crack center field, both at Dartmouth and later with one of the fastest semipro nines in the

<sup>5</sup> Vaughan, Wayland F., *The Lure of Superiority*, pp. 6-7. Holt.

South, could flail a golf course in the 80's, play a masterful game of tennis, was a demon wrestler, a strong swimmer, a good dash man in track, an expert at billiards, a champion trap shooter, and a fair basketball forward."

The reader will observe that in the two cases of over-reaction just given there was no re-directing of an urge; the urge which had been aroused in each case manifested itself quite in keeping with the situation which tended to block it. Thus over-reaction consists not of making up for a deficiency by engaging in some activity which does not involve the deficiency but rather of an over-intensified effort to overcome the defect in the most natural manner. It is nothing more or less than an unusually strong attempt to overcome directly a personal limitation, and it becomes over-reaction simply by comparison with our standard, the normal individual. Most one-armed men do not achieve renown in the field of athletics; when one does we may speak of his achievements as over-reactions, provided it is clear that his feeling of deficiency strengthened the urge back of his activity. It will be noted that over-reaction necessarily involves a persistent type of reaction to the difficulty.

Compensatory activity may take the form of *an over-evaluation either of a mental or physical trait or of personal property*. A person who has exceptionally pretty teeth may develop manners of talking and laughing that will reveal his teeth to the best advantage. A woman who has an unusually attractive face and figure may depend almost entirely upon these assets for gaining the attention and recognition of others. She early learns that she possesses certain personal assets which are valued highly by others and consequently gives an excessive amount of time and attention to the cultivation of these traits. This may readily lead to a neglect of other traits, and so to a one-

sided personality-development. Hence, there is often some basis for the characterization of certain women as "beautiful but dumb." Some men who have rather remarkable physiques spend considerable time admiring themselves before mirrors, in strutting up and down the beach at bathing resorts, in gymnasiums, etc. Or it may be a mental trait that is involved. One individual complains of the foul odors on the street, in the office, or wherever he happens to be, explaining that he has an unusually keen sense of smell, and incidentally implying that he is a very sensitive sort of individual.

An individual may make a great deal of some personal possession. A common example is the emphasis placed upon heirlooms. The object itself may have little or no intrinsic value, but it has a certain historical significance and its possessor may therefore gain a certain amount of prestige. Similar to this is the matter of collecting relics and antiques, which of course, are always shown to one's friends and talked about and discussed with more or less manifestation of pleasure and satisfaction in the owner. The society matron makes much over her diamonds—sometimes losing them to the enterprising burglar on account of her injudicious display.

A second and an extremely common form of compensation is *the identification of one's self with another individual, with a group, with a social institution, and even with inanimate objects*. This type of compensation is observed early in the child. Thus the youngster brags about his father, his gang or ball team, his school or club, his baseball glove. Obviously none of these things could add to the individual's feeling of importance and prestige did he not intimately associate them with himself, *i.e.* confuse or identify himself with them. Among adults the extrovert is particularly prone to this type of compensatory activity; hence he

is well suited to take part in social enterprises; the achievements and success of the group or institution to which he belongs are his achievements and his success. Note the proud manner of the extroverted football player whose team won the game, even though he, for some reason or other, was forced to sit on the side-lines. If not carried too far, compensation by means of identification has highly desirable results, provided, of course, the thing with which the identification is made is itself desirable. But if the identification is carried too far, the results may not be so good, as, for instance, when an individual forgets that he is merely a member of the group and presumes to speak and act for all.<sup>6</sup>

A common example of compensation through the identification of one's self with another person is found in the case of marriage. The woman of short stature falls in love with and marries the tall man and thereby gains, as it were, in stature. The person who is lacking in self-confidence and aggressiveness is likely to be attracted to the person who has them, and through his identification of himself with this person he acquires them, so to speak. In short, the truth of the old adage that opposites attract undoubtedly rests upon this ability of the individual to identify himself with others and to partake, as it were, of their attributes and assets. The mother usually makes a strong identification of herself with her child, and conse-

<sup>6</sup> Psychologically speaking, there is nothing more ludicrous than the mediocre person who holds forth at great length and with much fervor upon the marvelous achievements of the great American people, or of his political party, or his club, or his home town. For, after all, one does not praise others unless by so doing he can at the same time praise himself, and if it were impossible to praise another without at the same time praising one's self, it is indeed highly probable that no one would ever yet have been lauded except by himself. It is exactly this matter of identification which makes it possible for one person to praise another; but, if the identification is not too obvious, the praise is inoffensive and we all like it. From this we should expect the extrovert to be more generous in his praise of others than the introvert, and it is, of course, a fact of daily observation that the introvert is unusually sparing in his praise of others.

quently her hopes and ambitions, her sentiments, goals, ideals, and welfare become for her as definitely related to the child as to herself. Indeed, as the child grows up to womanhood and begins to express views and likes and ambitions of her own which differ from those of her mother, the latter is often puzzled and hurt and at an utter loss to understand how her own child can differ so from herself. If the girl does something which the mother considers unbecoming or disgraceful, the latter reacts with shame, as if she herself had committed the act.

Compensation through the identification of one's self with a particular group or organization is also common. Just as the boy boasts of his baseball team, so does the man boast—though in a less obvious manner—of his club, his home town, his political party, his country. The pleasure which an individual gets from belonging to a respectable organization or institution is something that receives universal recognition. Hence nearly every club or society has its honorary membership list. It might be pointed out that this tendency of the individual to identify himself with groups and institutions is perhaps the basic psychological factor underlying our present complex social organization.

It is not unusual for individuals to identify themselves with the various aspects of the inanimate world. A farmer in a western state had a threshing machine engine which he had named "Betsy." When Betsy functioned properly, the owner was all aglow with pride and happiness. He would walk about proudly calling the attention of others to Betsy's power and smoothness. But when something went wrong with Betsy, the look of pride and happiness became replaced by one of worry and deep concern which would last until Betsy was again "well." He

would often speak of his engine as "My Girl" and never grew tired of telling of *her* remarkable achievements.

An inmate of a mental hospital constructed himself a castle out of some old boxes and pieces of rope on top of a tumble-down barn. His castle was for the most part an imaginary structure but it meant the world to him and he never tired of pointing out its splendors to the visitor. More ordinary cases of identification of one's self with inanimate objects are to be found on every hand. A man is likely to become angry if another speaks disparagingly of his car; the young woman is delighted if one praises the dress she wears, although the dress was designed and made by someone else; this large stout woman bedecks herself with jewels and glows with rapture if another admires them. Second to *I*, *my* is perhaps the most significant word in the English language.

A third form or direction which compensation may take is in *belittling others*. Superiority is a relative matter and consequently it makes little difference whether one's self is raised or others are lowered. Hence, instead of endeavoring to achieve and prove one's superiority in a direct and constructive manner by meeting the various problems of life in a frank and wholesome way, one may turn about and attempt to prove the inferiority of others. We all have met individuals who are accustomed to look through the wrong end of the telescope when viewing the undertakings and achievements of other people. They are chronic fault-finders, destructive critics of the work of other people. The gossip is a person who compensates in this manner. She (or he) gains a feeling of superiority not as a result of her own constructive efforts or by lauding or attempting to prove her own superior attributes, but rather by seeking for and talking about the weaknesses and shortcomings of those around her. In this way she

makes herself out a superior individual by an implied comparison of herself with the person whom she is disparaging.

A psychologist of the writer's acquaintance, a man who is scarcely known in his field, recently remarked that he makes a practice of apologizing to his students for the fact that a certain man (who enjoys an international reputation in the field of psychology) is a psychologist. The compensation becomes obvious when we learn that the two men hold radically different views. Hence, by belittling the latter, who is generally conceded a place of considerable importance in the field of psychology, the former raises himself, so to speak, to an even greater height. But, if one is going to compensate by disparaging others, there is every reason for choosing a person who is decidedly superior. The reader should note the fact that we never belittle those whom we actually recognize as being inferior to us.

Somewhat similar to the form of compensation which we have just described is that of *blaming others for one's failures, or for one's shortcomings*. We observe this in the person who laments the stupidity of social customs and traditions, or of his business associates or superiors, arguing that these keep him from showing his true worth. Thus, one individual argues that he has been kept from succeeding because his immediate competitors have a "pull" with the boss. Another attributes his general failure in life to inadequate home training. Still another believes that he is ahead of his time, that others are unable to appreciate him, and that it is therefore useless for him to try. One individual—a college student—quite frankly declares that it would be useless for him to attempt to take a higher degree since he does not have the necessary intelligence. He points out that his parents are not very

intelligent and consequently, in keeping with the laws of heredity, it would be almost impossible that he should have inherited a very high degree of intelligence from them.

In general it is significant of nothing good when one person begins to blame others for his lack of success. To the extent that he becomes convinced that such is the case, to that extent will he cease to strive for worthy achievements. He is left morose and dissatisfied, the victim of his own nonadjustive compensatory thinking. For instance, the young woman who believes that she has an unlikable disposition as a result of improper training during her childhood, and who further believes that one's disposition once formed cannot be changed, is in a very poor position for making proper social adjustments. Many patients are found in mental hospitals who go to an extreme in blaming others for their failures and for their weaknesses. Thus one patient who had strong but unrecognized homosexual desires hallucinated voices urging him to engage in various perverted acts. These voices he attributed to certain designing persons who were plotting his moral ruin.

The next form of compensation to be considered is in certain respects the opposite of the last two types mentioned. In it the individual compensates not by blaming or belittling others but by *belittling himself*. This is a very peculiar type of compensatory activity and it is not easy at first glance to perceive its true nature. Let us keep in mind the individual who habitually belittles his own accomplishments and then see if we can discover any way in which such an attitude might bring credit to himself. It might be well at this point to remind the reader again that no one is inclined to prove and hold up to the view of others his own limitations; we all seek to become superior in one way or another, and then in turn to gain a recognition of our superiority from others. Consequently when an

individual belittles himself, this fact must be in one way or another either an indication to the individual of his own superiority or else an effort to achieve superiority. To begin with, we can say that by belittling himself the individual is refusing to let his present accomplishments stand as an adequate indication or criterion of his real value. Hence, when he shrugs his shoulders and says of something upon which he has been complimented, "That's nothing," he really is implying that that is nothing as compared to what he is actually capable of doing. Hence we see that by depreciating his own accomplishments he is really elevating himself by implication. In other words, by belittling his own accomplishments the individual is merely implying more or less subtly that he is capable of doing much more, that what he has done should not be taken as a measure of his true ability. In this way he gains greater superiority in an indirect manner and consequently we may speak of it as compensatory.

Undoubtedly, however, there are other factors besides the one we have mentioned which determine this particular type of compensatory activity. Thus we will frequently observe a person depreciating his own field of work or profession when talking to some one who belongs in another field. In this case he perceives the other person as being superior or representing a superior group and by disparaging his own work (or associates) he identifies himself with the other person, thereby elevating himself. Again the individual may first disparage himself as a means of placing himself in a position to disparage others. He frankly admits that he is no good and then proceeds to make others out as being of really less account than himself. He will usually bring his remarks to a close by some such statement as, "Mine is bad but his is worse." Or, if he does not actually make some such remark, he will usually

have implied the same thing somewhere in his conversation. And finally, an individual may depreciate his work or himself in an effort to gain a word of praise from others. This is the individual who invites criticism from others, assuring them that the more they criticise the better, and that they will offend him if they are not absolutely frank, and then becomes angry at the first word of unfavorable criticism they offer. We all know this praise-seeking individual and it is unnecessary to go into his psychology here.

Some individuals compensate by *encouraging a fatalistic philosophy*. They reason that everything comes to an end, that nothing is really permanent, that time will inevitably efface anything that one might create; so why try? Having once convinced themselves that it is not only useless but foolish to take one's work seriously, they are in a position not only to scoff at their own efforts and to declare that it really matters little whether they succeed or fail, but also to scoff at the efforts and achievements of others. The assumption of such an attitude toward life recompenses the individual in two ways; first, it protects him against possible failure, since he declares success to be wholly illusory; and, secondly, it enables him to disparage the success of others. Incidentally, he also achieves a certain superiority in his own eyes inasmuch as he recognizes the futility of life whereas others, having less insight and foresight, plod blindly on.

This type of compensation was well illustrated by a patient in a mental hospital. She very stoutly contended that everything was purely imaginary. She stated that she did not really exist, she merely imagined that she existed; the visitor did not exist, he merely imagined he did; she was not really sitting in a chair, she only imagined that there was a chair and that she was sitting in it. When asked if it was not necessary that something should exist

to do the imagining, she replied that it was only necessary that something should be imagined to exist. In short she declared that the sun, the moon, and the stars, Hell, Heaven, and Earth were all equally imaginary. The pleasure which she experienced at the puzzled look on the visitor's face was obviously manifest in her superior air; she was the only person who perceived the truth of things; others were intellectually too feeble to understand.

Standing in apparent contradistinction to the form of compensation just mentioned is that of compensating *through religion*. At least this is true with respect to the Christian and Hebrew faiths. Religion seems to be a sort of universal mode of compensation which results primarily from man's inability to sustain life for more than a relatively short period. In other words, it spares man that great final defeat, that ultimate failure, death. The individual who is thoroughly convinced that death is not a termination of his existence as a distinct individual but is only a change which must take place before he can live eternally, has succeeded, so far as he is concerned, in overcoming death. What a glorious compensation! Little wonder that millions take advantage of every opportunity for further convincing themselves of the divinity of Christ or the existence of a God.

Compensation through religion may become extreme, giving rise to religious fanaticism and to various delusory beliefs which are encountered in connection with definitely abnormal persons (the insane). One individual in a mental hospital believed himself to be Jesus Christ, another contended that he was God himself. It is not uncommon to hear of peculiar religious beliefs which spring up on every hand. Recently in one of the western states a religious fanatic (or a faker—it is sometimes difficult to differentiate between them) preached that the world was coming

to an end soon and that all who hearkened to the truth of his teachings would ascend bodily to heaven. According to newspaper reports, a number of people actually disposed of their property and quietly awaited the eventful hour.

Often individuals who experience certain desires or urges which they feel are reprehensible, compensate through religion. Morgan<sup>7</sup> cites a very interesting case of this type in a preacher. While in the pulpit this man upbraided his audience for their immoral ways, particularly the women for their short skirts, bobbed hair, rouged lips, etc. When not in the pulpit he frequently made improper advances to the young women. It is significant that so many young girls enter convents, the Salvation Army, or other religious organizations. Certainly a principal factor back of many of these individuals' taking up religious activity is the awakened sexual urge which normally comes with pubescence and, in these cases, threatens the moral integrity.

*Day-dreaming* is a very common type of compensation, particularly in the more introverted person. The child of seven or eight sometimes worries his mother because of his proneness to go off by himself and day-dream. The young girl pictures herself as a successful movie actress who is being showered with gifts and attention. The young boy pictures himself as an All-American football star or perhaps as a daring aviator or a western cowboy. The adult, too, has his day-dreams, and their content is as varied as human experience.

There are certain peculiarities of day-dreaming which must be kept in mind if one is to understand this interesting form of human activity. In the first place, we must believe, the day-dream is always an imaginary gratifica-

<sup>7</sup> Morgan, John J. B., *The Psychology of Abnormal People*, pp. 556-558. Longmans, Green.

tion of some urge which is not finding adequate expression in the overt activity of the individual. Secondly, being imaginary, the day-dream never adequately takes the place of overt behavior; *i.e.* it is only a partial or abortive expression of an urge. Thirdly, day-dreaming provides the individual with a much greater range of activity (though imaginary) than is to be found in reality. Fourthly, since the individual usually distinguishes between dreaming and reality and since he ordinarily holds himself less responsible for his thoughts than for his actions, day-dreaming offers him much greater freedom than his standards of conduct are likely to do. We have then on the one hand the fact that day-dreaming is not as satisfying as its corresponding overt activity, and on the other the fact that the individual may achieve in this way many things which are impossible for him in real life. From these two facts we might readily infer that the individual is going to be inclined to this form of compensatory activity to the extent that his overt activity proves insufficient as an outlet for his various urges.

Mental hospitals are full of cases who are living examples of day-dreaming which has been carried to an extreme and come almost wholly to supplant overt activity. This woman who sits stiffly in her chair, casting a haughty glance on those around her, believes herself to be the Queen of England. Another patient sits murmuring and smiling to herself all day long; that she is thinking (dreaming) is obvious, although she may refuse to let any one into the secret of her thoughts. Or, here is this man who never made much of a success in life, who was perhaps not richly endowed with talent and who encountered many environmental obstacles. Life was mostly a matter of disappointments and consequently yielded little satisfaction. But he found a way of over-

coming all his obstacles and winning out—he now thinks he is Henry Ford, and no one can doubt that he is more happy and thinks more highly of himself than when he was struggling with the problems of reality.

An individual's moral or religious sentiments may keep him from giving vent to some strong urge, perhaps sex. Day-dreaming offers a partial solution of such a problem. Thus one young woman who was rigidly moral in her views developed some very interesting erotic fantasies. She imagined herself to be in need of medical attention because of some vaginal trouble. This necessitated (in her day-dreaming) a rather thorough examination by a physician. This case shows rather clearly how the day-dream may take such form as to protect the individual against self-reproach and at the same time result in an imaginary (partial) gratification of an objectionable urge. Other individuals, less rigidly moral, give themselves unlimited range in erotic fantasy formation, although they would not think of granting themselves such freedom in their overt activity.

Many *antisocial acts* are undoubtedly compensatory in nature. The case of Loeb and Leopold illustrates this, since, if we may take the newspaper reports of the evidence introduced at the trial, one of the chief motives behind the act was to prove themselves to be some kind of super-men. Not infrequently an individual who fails to make satisfactory adjustments to society, becomes "soured" and then takes delight in proving his independence of it. He may go further and endeavor to prove his superiority to various social institutions, such, for instance, as the police department. It seems to be the general consensus of opinion that the average "crook" experiences no little satisfaction at outwitting the officers, aside from the satisfaction which would naturally follow his escaping the

penalty attached to his crime. This does not seem strange when we remember that the individual naturally represents authority, *i.e.* any external agency which imposes restrictions upon his activity. It seems that a given anti-social act may be little more than a gesture of this disapproval, particularly if the individual has failed to achieve the esteem and recognition of others in ways in keeping with social dicta.

The last form of compensation to be considered is that of solving the baffling situation by *becoming ill*. This type of reaction to difficult situations will be discussed in some detail in a later chapter and consequently we need only point out its general nature here. The reader has perhaps met one of those individuals who is always suffering, and who is wont to talk a great deal about his ills. The patient's physician fails to find any basis for the illness and perhaps concludes by telling the patient that he is nervous and needs rest. But rest does no good and so the patient, losing faith in one physician, goes to another, and then to a third. Finally he may lose faith in all physicians and turn to patent medicines. But the sufferings continue; and the patient continues to talk about them to anyone who will listen. It is the same old story of bursting headaches, indigestion, pains, insomnia, loss of appetite, etc.

Since usually no organic basis for the illness can be found, it is useless to try to understand it from a purely physical standpoint. It does take on some significance, however, when considered in its relation to the individual's adjustments to his environment. These individuals are almost invariably found to be making little or no adaptation to some vital problem of a personal nature. Naturally, it is by his illness that the patient accounts for his failure to make a better adjustment. A careful

study of his case will reveal, however, that the failure to adjust preceded the illness and consequently that the latter may be viewed as a secondary reaction to the problem to which no adequate adjustment has been made. Let us take a specific case and see how this works out. A young woman came to the writer complaining of headache, dizziness, great fatigue, pains, insomnia, loss of appetite, etc. She had consulted twelve or fourteen different physicians but had not been helped. She declared that she was kept from doing anything because of her illness, that if she tried to work her sufferings became unbearable. She was sure that if her physical sufferings could be alleviated she would be quite happy and also that she would be able to make a success in life. All this sounded quite plausible but since none of the physicians whom she had consulted had been able to find any organic disturbance that would account for her illness, her case immediately assumed a certain particular significance. A careful study revealed the fact that she had strong inferiority feelings because of her unusually short stature and because of a complexion somewhat marred as a result of smallpox. So much, indeed, did her short stature bother her that she burst into tears when she was finally induced to talk about it. She stated that she had never confessed to a single person that she felt inferior because of her almost tiny figure. Later she admitted that she never walked without high-heeled shoes even in the privacy of her own room. She used a great deal of powder and rouge in order to conceal her disfigured complexion.

This young woman had apparently never appealed much to the opposite sex and she had attributed this to the two factors just mentioned. Hence she had failed to adapt properly to the whole problem of the opposite sex. She could find no way out of the difficulty and so she be-

came ill. Her illness placed her in a position to say that she would have succeeded in life had it not been for her illness for which, of course, she was not responsible. Moreover, it kept her from actually trying to do anything, for, as she said, if she tried to work, her suffering became unbearable. In short, her illness may be viewed as a compensatory reaction to a baffling situation.

**Concluding Remarks.** From what we have said concerning compensatory activity the reader will have inferred that the connection between a given compensatory act and the urge of which the act is an expression is not typically conscious. That is true. The young woman just mentioned had no idea that her illness had any protective value to her, that its real function, so to speak, was to keep her from realizing her failure in life—one cannot fail if he is kept from trying. The young woman who goes into the convent does not do so with the conscious and deliberate intent of saving herself from possible moral degradation. The under-sized man does not deliberately set about to develop a strong voice in order to attract attention. The mother does not consciously identify herself with her child in order to achieve added distinction herself. Yet the individual does almost invariably assign a motive for his act. When the motive assigned is not only other than the true motive but is also of a nature to conceal the true motive, we speak of *rationalization*. Rationalization, then, is the assigning of a false motive to an act, mental or physical, as a result of the disfavor with which the individual would regard the true motive.

Also the reader will have inferred from what has been said in this chapter that compensatory activity constitutes a considerable part of the total activity of most individuals. This again is true. Social life is competitive in a strict sense of the word. We all want distinction, the

recognition and esteem of others, and the self-respect and good opinion of ourselves. We differ from each other more or less both in respect to inheritance and to training and opportunity. Consequently, although we start out to become all-around superior individuals, our particular limitations lead to inevitable failure in certain types of activity. Failure means inferiority to the individual who fails and consequently he sets about to efface his "disgrace" either by attacking other problems and proving his worthwhileness by overcoming these, or else by over-identification with those who are succeeding, or by blaming others, or by imagining himself to be a very successful person, or by becoming ill, or by one of the other various forms of compensation which we have discussed.

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## CHAPTER VII

### SOME COMMON MODES OF REACTION TO DIFFICULTIES (*Concluded*)

[INHIBITION; REPRESSION; DISSOCIATION]

**General Orientation.** We have discussed four general types of reaction which the individual may make when confronted by a difficult situation; that is, when an urge is blocked or thwarted. We saw that he may go through a series of trial and error reactions until one is tried which results in his adjustment to the situation; and since the trial and error type of reaction is both the most common and the most adjustive in the end, we accepted it as a strictly normal type of response to a difficulty. But we have also seen that the individual may persist in a non-adjustive reaction, or he may regress to a more infantile type of response, or he may turn away from the present difficulty and endeavor to compensate for his failure to adapt to it by activity in some new direction. In the present chapter we shall consider three more types of reaction to baffling situations. But before doing this it may be well once again to get clearly before us our general concept of the normal individual.

The reader should try to keep in mind that the human individual is normally an organization of many different smaller systems, chief among which are innate dispositions, sentiments, and attitudes. And the expression of these various systems as a single organization we have

called the personality. The reader must also bear in mind, if he is to grasp the concept of mental abnormalities which we are developing, that each of these mental systems has as an integral aspect of it a dynamic principle, an urge. Since an urge is dynamic in nature, since it is a matter of kinetic energy, it must express itself in some manner or other. Moreover, a given urge because of the cognitive and affective aspects of the mental disposition to which it belongs, tends to manifest itself in a more or less specific manner.

In the last two chapters we were concerned primarily with two types of baffling situations, namely, those which result when an urge is blocked by an environmental obstacle, and those which result when an urge is blocked by a personal deficiency or limitation. In this chapter we shall be considering almost entirely that class of difficulties which arises when an urge is blocked by another urge.

When two antagonistic urges are simultaneously aroused, we have what is currently spoken of as a condition or state of mental conflict. Thus if the two innate dispositions of anger and fear are aroused at the same time, the two urges belonging to these dispositions tend to manifest themselves in opposite types of behavior; they are in conflict with each other. But we have limited the term "mental conflict" to include only those cases in which one urge stands in the relationship of sentiment of self-regard to the other urge at the time of the conflict. And it is essential at this point that the reader should fully recognize the fact that almost any urge belonging to the individual may, depending upon the situation, represent, so to speak, the sentiment of self-regard. To illustrate: A arouses anger in B by grossly mistreating a child in the latter's presence. But A's threatening attitude and superior size also arouse in B fear. Now we have in B a conflict between anger and

fear. One of these two urges, anger, is, we may assume, entirely acceptable to B on this particular occasion, while the other, fear, is unacceptable; it results in a feeling of shame. Hence we may say that anger stands in the relation of sentiment of self-regard to fear in this particular instance. On another occasion, however, anger might be aroused in B, let us say, by a child and in this case, we may assume, B's anger is not acceptable to him; he is ashamed of it even at the time. It is evident, therefore, that the same urge may be entirely compatible with the sentiment of self-regard on one occasion and quite incompatible with it on another occasion. But since we have limited the term "mental conflict" to those cases in which one of the two urges is definitely opposed to the sentiment of self-regard while the other is compatible with it, we may simply speak of conflicts as arising between the self-regarding sentiment and antagonistic urges (innate dispositions or sentiments).

We are now ready to consider the individual's reactions when one urge is blocked by another urge, when a strong impulse or desire comes into conflict with the individual's self-regarding sentiment.

**Inhibition.** It is readily conceivable, in keeping with the concept of the individual which has been advanced, that if two antagonistic urges are simultaneously aroused, the stronger urge will tend to keep the other from expressing itself in a natural manner. The stronger urge usurps the mechanisms of the individual, so to speak, and gains expression, thereby, incidentally, excluding any natural or adequate manifestation of the weaker urge. But if we are to hold strictly to our contention that an urge is of the nature of kinetic or active energy, we must account not only for the energy represented by the stronger urge but also for that of the weaker urge. In other words, when an

urge is kept from manifesting itself in its own peculiar form of activity, what becomes of its energy? Usually we may easily account for it in terms of the emotional disturbances manifested by increased muscular tension, and in circulatory, respiratory, and other changes of the visceral functions, etc. In other words, we may reasonably assume that the weaker urge, being kept from expressing itself through its more natural channels, expresses itself in this vicarious manner; that is, in forms of activity which have no particular significance with respect to the object or situation which aroused it. Now if the individual consciously experiences the weaker urge in the sense that he becomes conscious of a desire or an impulse toward a certain type of activity which would be a natural manifestation of the urge, but which activity is not carried out because of a second and stronger urge (desire or impulse) which inclines him to a different and antagonistic type of activity, we should speak of the weaker urge's being *inhibited*, provided the individual becomes normally conscious of it in subsequent similar situations. The necessity for this last qualification of our definition of inhibition will be made clear a little later.

Our everyday life is so full of inhibitory reactions as to make examples hardly necessary. Culture and refinement are to an extent matters of inhibitory reactions. The *gentleman* inhibits his anger when it is aroused by a woman and, often, when it is aroused by another man. Most of us have frequent occasion to inhibit sexual impulses. Some college instructors inhibit a tendency to "show off" before their students; others do not. In the recent World War the soldier frequently found it necessary to inhibit strongly aroused fear.<sup>1</sup>

<sup>1</sup> When we speak of the individual's inhibiting an urge, we have in mind, of course, as the inhibiting agent, the sentiment of self-regard.

We said that an inhibited urge may manifest itself in a vicarious sort of manner. This, however, is not always the case. Rather, it may find an outlet in a coherent and unified type of activity. An example would be the individual who, perceiving that he is about to weep, begins to sing. True, his voice may be none too steady but nevertheless singing is a type of activity which can be readily distinguished from weeping. A second example would be the boy who is taunted by his playmates while engaged in some unpleasant and humiliating task such as taking care of his baby sister. The anger aroused in him by the taunts finds a partial outlet in an excessive degree of concern and attention to his charge. In such cases of inhibition the two antagonistic urges appear to find a common channel of expression; that is, there results a type of activity which is somewhat of a compromise.

Inhibitory reactions are perhaps both the most common and the most satisfactory or adaptive manner of resolving mental conflicts. Society demands that the individual inhibit, or in some other way prevent, the natural expression of many of his urges almost every day; and if one does not have a fairly well-developed sentiment of self-regard to act as an inhibiting agency to his antisocial impulses, he is almost certain to get into difficulty sooner or later either with himself or with society or both. Unfortunately, however, not all cases of mental conflict are handled in that simple and satisfactory manner which consists of the objectionable urge's being inhibited by the sentiment of self-regard.

**Repression.** We owe the concept of repression primarily to Sigmund Freud, the inventor of that system of metapsychology known as psychoanalysis, sometimes as Freudianism. It would be beyond the scope and purpose of the present text to give a detailed exposition of psychoanalysis;

let it suffice to say that Freud was led to his concept of repression by his study of various types of reaction, both of normal and of abnormal individuals, which had remained up to his time very baffling alike to psychology and to the medical profession. Let us examine this concept of repression, not necessarily as it was originally formulated by its inventor but rather as it is currently used.

Perhaps we can make the nature of repression clearest if we start out by comparing it to inhibition. Let us list the more characteristic features of inhibition and determine in the case of each whether repression is similar or dissimilar in that respect. (a) Inhibition may be thought of as the shunting of an urge into other channels than those which it would follow if there were no inhibiting factor present. (b) This shunting of the urge results in a form of expression (activity) which is different from that to which the urge would otherwise give rise. So far there is no significant difference to be pointed out between inhibition and repression. (c) If a given urge is merely inhibited in relation to a certain situation, it will tend to be aroused and will be consciously perceived or experienced (as a desire or impulse) by the individual upon the later occurrence of a similar situation (stimulus). But if an urge is repressed, then although it is subject to arousal upon a re-occurrence of the situation in relation to which it was repressed, it is not consciously perceived or recognized by the individual as such. This is one of the fundamental differences between inhibition and repression. (d) Inhibition appears to occur most typically in those cases where the antagonistic urge is not extremely strong and in those cases where it is not too incompatible with the self-regarding sentiment. Repression, on the other hand, appears most likely to occur when the objectionable urge is so strong or so incompatible with the sentiment of self-regard as to immedi-

ately threaten the individual's moral integrity. (e) An urge which has been inhibited tends, upon being again aroused in a similar situation, to express itself consciously in its natural manner. A repressed urge, upon being aroused, *apparently* does not tend to manifest itself in its natural manner, although, in point of fact, there is considerable evidence to support the view that it does actually tend to do so but that there is present an active force which is in opposition to such a manner of expression. (f) The individual is able to exert considerable control over the particular form of manifestation which an inhibited urge takes. The individual has little if any control over the particular manner of expression which a repressed urge takes. A careful study of the following case, adapted from Hamilton, will help to make clear what we have said.<sup>2</sup>

CASE 4. A woman in her early thirties was troubled by the following symptoms: A haunting sense of craving something intensely, without which life seemed utterly bleak, but with no idea as to what it was she craved; a persistent feeling that she had nothing to live for; attacks during which she felt weak and feared that she would die for the lack of the will to live; fear of suicide; she was sometimes afraid to go to sleep; a lonely, depressed feeling which came over her in waves. Except for these symptoms, which she was wholly unable to account for, her life was entirely satisfactory.

A study of her case brought out some interesting and significant facts which she had completely forgotten. When she was twelve years old she went to the city to live with her childless aunt and uncle that she might have the advantage of better schools than those near her home. One night her uncle came into her room after she had retired, ostensibly to close the window. He sat down on her bed and commenced to fondle her. After he had gone she felt somewhat ashamed but had, nevertheless, been pleasurably stimulated by her uncle's actions. Thereafter he habitually came into her room at night, gradually taking more and more liberty with her. She both resented and welcomed his attentions. Finally, she awakened one

<sup>2</sup>Hamilton, G. V., *Objective Psychopathology*, Case I. Mosby.

night to find her uncle in the act of attempting to seduce her. Immediately her whole nature rose up in revolt. The whole affair with her uncle suddenly struck her as being overwhelmingly nasty, immoral, and disgusting. At this time she was fifteen or sixteen years of age. From that time on her whole attitude toward sex was radically different. For the next few years she took great delight in demonstrating her total lack of susceptibility to sexual stimulation, mixing with a group of morally loose young people but remaining absolutely frigid and a virgin without making the least conscious effort to do so. Later she decided to break away from her immoral associates and lead a more conventional life. She married a man of whom she became very fond and whom she respected very highly. After her marriage she was surprised to find herself sexually anesthetic. She submitted to the advances of her husband out of a sense of duty but not without a certain degree of repulsion. Gradually the symptoms developed which have been mentioned.

This case is very instructive concerning the matter of repression. This patient's relations with her uncle when she was a girl were such as to arouse on the one hand the sexual disposition and on the other a certain resentment, feelings of shame, guilt, and disgust, all of which stood in the relation of sentiment of self-regard to the sexual urge. We must assume that the desire to keep her self-respect, broadly speaking, was sufficiently strong to partially inhibit the expression of the sexual urge. That is, upon each occasion, although the sexual urge was partially inhibited, it tended nevertheless to express itself in a natural manner. But finally, due to things being brought to an issue, the urge (or urges) which opposed the sexual urge became so strong that the sexual urge became repressed and consequently thereafter it did not tend, *apparently*, to express itself in a normal way. That the sexual disposition was actually repressed is shown by two facts. In the first place the patient suddenly became frigid, totally indifferent to sexual stimulation; in the second place, by the time the mental symptoms had developed, the patient had com-

pletely forgotten her experiences with her uncle, and when questioned concerning any early sexual experiences, she had sincerely declared that she had never had any until she was married. It was only with difficulty that she finally recalled her experiences with her uncle.

The reader must be careful not to assume, however, that a repressed urge amounts merely to a dormant urge; that is, to an urge which is not subject to arousal. For such is not at all the case as we view it. More strictly speaking, a repressed urge is one that is prevented by a stronger urge (sentiment) from manifesting itself, or even tending, *apparently*, to manifest itself, in its original form. The urge is still aroused upon occasion but it does not manifest itself in a natural manner. Nevertheless it does express itself in one way or another. In the case which we have just considered, we should consider the mental symptoms to be in part nothing else than abnormal or unnatural forms of expression of the sexual urge. This interpretation is at least partially substantiated by the fact that upon the patient's recall of her early sexual experiences and upon her perceiving the causal connection between these experiences and her mental symptoms, the symptoms disappeared and her sexual urge again manifested itself in a purely natural manner. In short, with the disappearance of her symptoms she lost her frigidity and for the first time since her marriage became normally responsive to the sexual advances of her husband.

There are other facts pertaining to repression which have been mentioned. We have seen, from the preceding example, that if a disposition is strongly repressed it is no longer consciously manifested as such. Yet we have said that a repressed urge tends to manifest itself in its natural manner—certain evidence of this will be mentioned later—and this, it seems, should lead to some recognition of it by

the individual. Why, for instance, did the patient (Case 4) not experience any sexual urge or desire in relation to her husband if this urge, though repressed, did tend all the while to express itself in a natural sort of way? Unfortunately we are not able to give an entirely satisfactory answer to this question at the present time. We can point out however that apparently the patient's first reaction to sexual stimulation, following her experiences with her uncle, was a feeling of repulsion and disgust. Such a feeling is disagreeable and predisposes the individual unfavorably toward the object or fact which arouses it. Now sexual excitement, on the other hand, is distinctly agreeable and predisposes the individual favorably toward the object which arouses it. But since, strictly speaking, one cannot feel both disagreeable and agreeable (or pleasant and unpleasant) at the same moment with respect to a single fact, it was inevitable that sexual excitement should not occur if the feeling of repulsion was already present. Since repulsion was the first response to sexual stimulation, sexual excitement was barred, so to speak. Thus it was only when the feeling of repulsion to the sex act ceased to be aroused that she became normally responsive to her husband.

On the other hand, if we take an instance of less complete or strong repression we shall see that the individual may become aware of the true nature of the repressed urge. This will also bring out more clearly the fact that a repressed urge does tend to manifest itself in a normal sort of way. Let us take a case of incomplete repression and see how it works out. Two young men, A and B, are in love with the same girl. A wins the girl. B's natural reaction is one of envy, hurt pride, antagonism toward A, etc. But B has always prided himself on being a good sport, a game loser, and consequently these feelings of envy,

hurt pride, antagonism, etc., are objectionable to him; they tend to make him out something which he does not wish to believe himself to be. Consequently, these feelings are repressed; B congratulates A upon winning the girl, agrees to be best man at the wedding—and secretly admires himself for being a game loser. But now B's friends notice that he is inclined to be unduly critical of A. He speaks somewhat depreciatingly of his manner of dress, of his ability at cards, of his achievements in general. Following a few drinks B quite loses himself in a veritable tirade of disparaging remarks concerning A. But the looks of surprise on his companions' faces suddenly bring his attention to the fact that there is only one possible interpretation of his remarks: namely, he cannot help perceiving that envy and animosity were back of what he said. This places him in an unfavorable light in his own eyes and immediately his antagonistic feelings are again repressed. The desire to be the good sport that he wants to believe he is asserts itself and he suddenly waxes generous in his attitude toward A. "But of course everyone has his faults. After all is said, A is a pretty good sort of fellow. C was a lucky girl to get him, etc."

In this case we see that the individual becomes aware at times of the repressed urge, and also we see that the urge tends to express itself in a natural manner. The urge finds its opportunity, so to speak, when the desire to be superior (fair, generous, a good sport) is not strongly aroused. From this example we may also infer that repression does not necessarily result in mental symptoms. Indeed, if this were not true we should all undoubtedly be mental cases, since it seems quite obvious that we all repress in some degree. The exact outcome of any given case of repression would seem to depend upon a number of different factors. Strong dispositions, such as sex and fear, are

not frequently repressed completely. When they are, mental symptoms almost invariably result provided the individual continues in an environment which is conducive to their frequent arousal. The sex urge may be repressed, and frequently is, so far as its most natural form of expression is concerned. But usually some partially adequate form of expression, such as masturbation or erotic day-dreaming, occurs with more or less frequency.

Whether or not the repression of a relatively strong urge will result in mental symptoms (abnormal forms of expression) appears also to depend in part upon the strength of the total integration of mental systems of the individual. In turn the strength of this integration seems to depend largely upon the extent to which all the various systems are centered about some one sentiment. Most of the activity of some individuals is clearly determined by some one strong sentiment. To such a sentiment invariably belongs a clear conception of a specific goal to be reached. All urges which are in keeping with the attainment of this goal will become integrated with the major urge of the sentiment. And to the extent to which this sentiment is strong, to that extent do we assume that the various urges of the individual belong to it, are intimately integrated with it. An example of a relatively dominant sentiment would be found in the case of the ruler whose one hope and ambition in life is to extend the boundaries of his country. Any urge which is incompatible with this one great ambition or urge is readily inhibited or repressed. Incidentally there is some evidence that a strong urge of this sort may somehow or other drain into itself, so to speak, not only the energy belonging to compatible urges but also much of the energy normally belonging to incompatible urges. If this is true, then we should expect acts of repression to be effected fairly easily, since the incompatible

urge would have been already robbed of part of its strength. Likewise we should not expect often to find mental symptoms in individuals who are largely dominated by a single sentiment. We popularly speak of such individuals as being "strong-minded," "strong-willed," or as having a "strong character or personality." It is true that these individuals may be, and often are, considered abnormal; but their abnormality lies in the fact of an exaggeration of activity in a given normal direction rather than in specifically abnormal forms of activity.

Repression, then, is one of the various ways of reacting to a baffling situation. It serves as a more or less immediate solution of the difficulty; but unfortunately its bad effects often outweigh its good ones, as in the case of the patient previously mentioned. For repression is too frequently not a real solution of the problem; it amounts rather to an ignoring or forgetting of the problem. On the other hand repression undoubtedly has its value in our present highly complex social life. The individual never actually loses his basic, inherent nature, which is utterly selfish, egoistical, and asocial. To an extent his innate urges can be diverted into more devious paths and thus be brought into the service of society in the reaching of their goals, in gaining adequate expression; but on the other hand it is often necessary for them to be directly inhibited or repressed. If your brother's best friend makes an insulting remark to you, you perhaps inhibit your anger and even soon forget the offense out of your fondness for your brother. If your brother's sweetheart or wife inadvertently arouses strong sexual desire in you, you perhaps become somewhat horrified by this desire, with the result that it is strongly repressed. If the desire is unusually strong, there may arise compensatory feelings of aversion or dislike toward the woman. The person who, by

virtue of his strongly integrated mental organization, quickly and successfully represses his objectionable desires or urges, is characterized by a strong semblance of directness, unity, and coherency in his thinking and behavior. On the other hand there is the individual who appears to be dominated now by one urge, now by another. His behavior lacks in directness and coherency, remains uncertain and unpredictable, and he impresses us as being the everlasting victim of unresolved conflicts. The difference between the two types of person lies not in any relative lack of conflicts in the former but rather in the more ready resolution of the conflicts because of the dominance of some strong and enduring sentiment.

A question of considerable theoretical interest with respect to repression is whether conflict followed by repression may take place subconsciously. Is the individual necessarily cognizant of the presence and nature of the conflicting urges; need he be aware of only one side of the conflict, or need he be aware of neither in order that repression may occur? We are unable to give a definite answer at the present time to this question.

A soldier sees active service for the first time and becomes almost overwhelmed by fear. The fear causes him to suffer a loss of self-respect, which entails shame. He now not only deliberately endeavors to ignore his fear but he throws himself into the thickest of the fray; his desire to prove his courage to himself and to others has become much stronger. He completely loses all sense of fear; it has been repressed. In this case both sides of the conflict are clearly conscious.

But there are numerous cases of repression in which the repressed urge appears not to have been consciously experienced by the individual. For instance, one of the writer's patients, a man who has always had very high ambitions

and who has set for himself very high goals, recently lost his position, a fact which has occasioned him much worry. In applying for another position he found himself greatly handicapped by an extreme tenseness throughout his body. In fact, while in conference with the man to whom he was applying for a position he (the patient) was unable to raise his head and was scarcely able to talk, so tense were the muscles of his body. A study of his case reveals this tenseness to be a manifestation of fear, although he does not experience fear as such; it has been repressed. He does, however, experience fear upon certain occasions, as, in one instance, when he became involved in a dispute with a bootblack. In a sense he has an unusually high degree of self-confidence and thinks very highly of himself. Losing his position did not engender conscious fear. Yet it seems quite clear that the basis of his present difficulty is an extreme fear (anxiety) that he is not going to succeed in his work. Thus it at first appears that fear became repressed without first becoming conscious. However, it is extremely possible that a fear reaction to competitive situations was strongly repressed in his past, since he has succeeded in recalling occasions in the past when he deliberately tried to overcome fear. If this is the case, then we should not expect fear to become conscious as such upon his meeting this type of situation now.<sup>3</sup> And in every case of repression where the factor which is repressed does not first become consciously recognized, there is this possibility that we are dealing, in part, with a repression which has already taken place, and it is possible that the repressed factor was originally consciously recognized. At the same time we do not wish to deny the possibility of repression

<sup>3</sup> Later on in the analysis of this case the patient came to experience extreme fear when in the type of situation which had formerly given rise to the tenseness. With the gradual development of a different attitude and a different type of reaction to competitive situations, the fear-reaction slowly disappeared.

occurring without the repressed factor ever having been consciously perceived.<sup>4</sup>

On the other hand we must all recognize the obvious fact that an urge may operate without the individual's being aware of the nature of it. It is exactly this type of fact that we recognize when we speak of an individual as being *naïve*. The philanthropist may sincerely believe that his charitable acts are motivated by a great sympathy for mankind, whereas the real urge back of them may be a wish to win the recognition and esteem of others or, perhaps, merely to raise his own opinion of himself. The young girl may be somewhat startled to learn that her platonic feelings toward her sweetheart are fundamentally an expression of the sex urge. A careful analysis of the person who is unusually disgusted by a certain act in another will frequently reveal a repressed desire in himself to commit the same kind of act.

We have pointed out that repression applies typically not merely to an urge but to a mental disposition possessing also affective and cognitive aspects or elements. So far as the urge itself is concerned, repression affects usually only a certain manifestation of the urge or the manifestation of it in a particular type of situation. Repression usually involves a sentiment; this means that the repression affects conative, affective, and cognitive elements. The soldier who has strongly repressed fear no longer has a tendency to flee from the fear-exciting situation; he no longer experiences fear as such when in the situation, and he will have forgotten that he was ever afraid when in such a situation. Hence repression may be

<sup>4</sup> We may again call the reader's attention to the fact that when we speak of an urge, we really have in mind a mental disposition. It is always the affective and cognitive aspects of the disposition of which the individual is particularly conscious. Being conscious of an urge consists of consciously experiencing an impulse or inclination toward a specific type of activity.

viewed as a special type of amnesia. It is essential to keep in mind, however, that although a sentiment is repressed, it nevertheless continues to exist and to manifest itself, or at least it *tends* to manifest itself.

A repressed disposition (innate disposition or sentiment) is usually spoken of as a "mental complex," or simply as a "complex," or sometimes as a "repressed complex." Many psychologists believe that complexes exert a powerful influence on the individual's activity. The influence may be unduly strong simply by virtue of the fact that the urge back of the activity is not consciously recognized by the individual and consequently is but little subject to conscious direction and control. An individual commits some act more or less unthinkingly, or, perhaps even against his volition; he then attempts to justify the act by assigning some rational motive to it. This, as we have already said, is called rationalization. An example would be the case of the father who became very angry at his daughter and strangled her to death because, as he said, she did not have dinner ready for him when he came home. Such an act immediately suggests some other cause or motive than the one assigned by the individual himself. In this particular case it was learned that the father had been brooding for months over the thought of his daughter's plans to get married. Later he came to see and to admit that he had killed his daughter rather than let another man have her, and not because she was late with his dinner. In other words, he had invented a reason for his act, being either unwilling to admit or unable to perceive the true motive.

Since repressed motives are always hidden motives, it is not always easy to discover them and to determine their true nature. An European psychiatrist, C. G. Jung, has devised a means known as the "free association method" for

detecting repressed motives or urges (complexes). It consists of presenting the individual with a standardized list of words, one at a time, and having him respond with the first word that comes to his mind. His responses (response-words) are then considered with respect to the time which he takes in making each response and with respect to the nature of each response (word) when compared with those of the average individual. To illustrate: Most individuals respond to the word "guilty" with such words as "innocent," "punishment," "crime," etc., and they take, let us say, an average time of 1.2 seconds, with relatively little variation from this average. But one particular individual responded, after 5 seconds, with the word "who." The reaction time was not only unusually long but the response-word itself is unusual. Questioning this individual brings out the fact that she recently became involved in a love affair, which has caused her considerable worry. She has not dared to tell her parents or friends of her affair and consequently it has given her a feeling of guilt. She has endeavored to repress this feeling and to convince herself that she had a perfect right to do what she did, that she was fully justified, and that it was no one's business. But despite this rationalization the feeling of guilt remained, and became partly repressed. Now when she hears the word guilt she tends to think of herself and of her illicit love affair. She might express the tendency which is first aroused by the word "guilt" by responding with "me" or "I'm guilty," but this would be an admission which she refuses to make even to herself, and moreover it would betray her to others. Consequently, such thoughts are immediately inhibited, or repressed, and this repression tends to lengthen her reaction-time. Moreover, any recall of her love affair arouses strong feeling and this too interferes with her

mental associations. These two factors explain her long reaction-time. But the feeling of guilt which is aroused by the word "guilt" tends nevertheless to express itself and consequently only partly yields, so to speak, to the antagonistic urge which is to conceal and to deny any guilt. These two urges strike a compromise and both find partial expression in the word "who" which may be taken both to imply and to deny guilt. In other words, it is equivalent to asking "Who is guilty?"

This free association test of Jung is based, then, upon certain fundamental assumptions. First, it is assumed that any repressed urge when aroused tends to manifest itself in a natural manner. Secondly, there is always a repressing agency which tends to keep the repressed urge from gaining natural expression. Thirdly, any response to a stimulus which is potent for arousing the repressed urge will be necessarily a partial manifestation of both the repressed and the repressing urges. Fourthly, a long reaction-time is usually indicative of a conflict between incompatible urges. Such characteristics of the response as the reaction-time, the connection between the response-word and the stimulus-word, the tendency to repeat the stimulus-word, a tendency to relate the stimulus-word to one's self, etc., are called "complex indicators" and afford a means, according to Jung, of detecting complexes and determining their nature. If this can be done, the real significance of the individual's abnormal reactions, his mental symptoms, becomes clearer. Obviously the success of the method will depend largely upon the stimulus-words chosen; and for this reason it is sometimes better to use an improvised list than to depend upon a standardized list, for the standardized list may or may not contain "crucial words," words possessing potency for arousing a complex in a particular case.

**Dissociation.** We have seen that a mental disposition may be repressed or kept from expressing itself in a natural manner by one or several other antagonistic dispositions. But we have also seen that although a repressed urge is kept from expressing itself in a natural manner, it does nevertheless tend to do so. This means that the disposition which has undergone repression is still integrated with the other dispositions which make up the total mental organization of the individual. In other words, the repressed urge is still under the influence of, and in turn exerts its influence upon, the other mental dispositions to a very definite extent. Now supposing a given disposition becomes entirely broken off from the main organization, no longer having any connection with it and consequently no longer exerting any influence upon the main organization or being influenced by it, we should then have a case of *mental disintegration or dissociation*. And we might think of the process or act of becoming dissociated as a definite reaction to a difficulty.

We should expect dissociation to differ from repression in its manifestations in certain fundamental particulars. In the first place, we should expect no great change to occur in the personality of the individual on account of repressions having occurred, since the pattern of his mental organization is still intact. In the second place, we should expect him to be conscious in some way of the manifestations of the repressed disposition (s), since these are still integrated with the total organization and consequently must exert an influence upon it. This we have seen to be true: the manifestation of a repressed disposition, a complex, is always a conscious manifestation (symptom). Thirdly, we should expect the amnesia to be partial rather than complete in the case of repression. Fourthly, we might expect repressed dispositions

or urges to express themselves in a natural manner upon certain occasions, as in dreams, under the stress of intense stimulation, etc. This again seems to be the case. And finally, we should expect to find the individual who is suffering from mental symptoms resulting from repression to be greatly concerned over his symptoms. The picture of dissociation is in most respects quite the opposite of that which we have just drawn of repression. The change in personality may be ever so great, depending upon the extent and complexity of the dissociated system. This results from the fact that the pattern of the mental organization has actually been broken, changed, and a part of the total organization lost. In a case of true dissociation we should not expect the individual to be conscious of the manifestations of the dissociated disposition in a normal and direct manner. We should expect to find amnesia resulting from dissociation to be relatively complete. We should expect the individual to have less conscious control over the manifestations of a dissociated urge than over the manifestations of a repressed urge. Finally, since the disposition is dissociated from the main organization, we should not expect to find the individual greatly concerned about its manifestations.

Now let us examine a case of dissociation in the light of what we have just said. The following case, given by Janet,<sup>5</sup> illustrates many of the points which we have mentioned.

CASE 5. Here is an hysterical woman, Leg., who has led a very eventful life, and has had several very dramatic adventures, capable of upsetting her mind and filling her head with those fixed ideas that lead to somnambulisms. One day, at the period of her menstrual discharge, she had searched her lover's desk and had found a letter that confirmed her suspicions, showing her that he had deceived her.

<sup>5</sup> Janet, P., *Major Symptoms of Hysteria*, pp. 61-63. Macmillan.

She fell into a great passion; her menstrual discharge was stopped, of course, and she had a crisis of delirium in the form of monoidaic somnambulism, during which she acted the scene over again. Another day, as she was taking a walk with her lover, she had been surprised by a violent storm and frightened by a very loud thunderclap. Her lover, it appears, had not proved courageous, and had not been equal to the task either of reassuring her or of finding a shelter for her. She got terribly angry with him, had a violent crisis of somnambulism, during which she heard the thunderclap, fainted, and then made a scene with her lover. That, again, is quite simple and conformable to the rule. Now a third story. One day, again at the period of her menstrual discharge, she stole a revolver, placed herself in ambuscade on the roadside, and saw a carriage pass by in which was her lover with her rival. She shot at them, and fell back in a crisis of delirium. Other adventures happened to her, the result of which was the same.

After all these accidents, she was admitted into the hospital, and nearly every day, on the slightest occasion, she falls into crises of delirium. These crises begin at hazard, by the recital or by the acting, as you please, of one of her adventures. She has a haggard look, trembles, and puts her hands before her face with an expression of violent terror. She shuts her eyes as if before flashes of lightning, and acts the scene of the storm; then, suddenly, without awakening, her face takes on another expression. She seems to be looking for keys, breaks open drawers, reads letters, utters shrieks of fury. Lastly, her hands grasp an imaginary revolver, she looks out at the window with an infuriated air, pulls the trigger, and falls back in a fainting fit. These three scenes and others quite like them begin over and over again indefinitely, succeeding one another, but not always in the same order. They may last for hours together. That is again a somnambulist state. The mind is likewise concentrated on one idea, and remains closed to external things.

In the case of the young woman just described, there was no memory during the waking (normal) state of these peculiar dramatic reënactments of former experiences. Nor, we are led to infer, was there any memory of the experiences themselves, except during their re-enactment. Hence it is clear that certain experiences, or

better, certain sentiments and innate dispositions relating to a given object (her lover) had become dissociated from her main mental integration and therefore no longer belonged to her everyday conscious life. Moreover this dissociated system was sufficiently strong when aroused to usurp the mechanisms of the individual, automatically inhibiting an expression at the time of the main organization. In other words, during these *somnambulic* periods she was concerned with (conscious of) only those facts which constituted and definitely related to certain episodes during her past life; her immediate environment at these times had no significance for her except in so far as it could be made use of in the re-living of former scenes; to all intents and purposes she was otherwise quite oblivious of it. She was wholly unable to control this dissociated mental system; it occurred automatically, so to speak, regardless of any volition on her part. And, finally, these peculiar manifestations during the *somnambulic* periods occasioned her no distress in her normal state since she was not conscious of them, had no memory of them.

From what we have said, the reader should be able to make out the chief differences between repression and dissociation. Perhaps it should be said, however, that the two phenomena are less distinct from each other than our discussion would seem to imply. Dissociation need not be an all-or-none type of thing. We recall that the human infant is relatively unintegrated. He slowly becomes integrated under the influence of his environment, but that he ever achieves a perfect integration is hardly conceivable. Since dissociation or disintegration is the opposite condition from integration, we must assume that we are all dissociated to some extent. This merely means that the bonds between the various innate dispositions and sentiments and the sentiment of self-regard may be of any

strength whatever. If the bond between a certain innate disposition and the sentiment of self-regard is extremely weak, this amounts essentially to a dissociation of the innate disposition from the main integration. For instance, here is an individual who has an uncontrollable temper. He becomes angry at the slightest provocation and his anger completely dominates him for the time being; he completely loses his head. Now we may equally well speak of his anger as being essentially dissociated from his personality or we may speak of it as not being integrated with his personality. Ordinarily we should mean the latter in case his anger never had been properly within his control, and the former in case he had lost his ability to control it. It is only in the more extreme cases of dissociation that there appears to be no connection at all between the dissociated system and the main integration.

It was found that repression is the result of conflict between incompatible urges or dispositions; what causes dissociation? In the majority of cases dissociation appears to be the result of repression, and, therefore, indirectly the result of conflict. A young woman was torn between the desire to yield to the unconventional proposals of her lover and her moral and religious sentiments. The former was repressed over a period of several months with the result that an extreme case of dissociation developed. Any number of cases could be cited in which repression clearly preceded the dissociation. But it also appears possible if not probable that dissociation may occur in the absence of repression. Note the following case given by McDougall.<sup>6</sup>

CASE 6. A sergeant, fighting on Gallipoli, stooped to pick up a bomb which a Turk had hurled at him, intending to hurl it back at the enemy. As he reached for the bomb it exploded. He was not

<sup>6</sup> McDougall, Wm., *Outline of Abnormal Psychology*, p. 237. Scribner.

wounded or stunned; but he opened his mouth widely (without doubt as the first step in the natural fear reaction of uttering a cry), and then found that he could not close his mouth or withdraw his tongue, which remained protruding. After some hours his tongue gradually withdrew and his mouth closed; but he was then completely mute: he could not utter a sound. He remained mute for months and proved to be a most obstinate case of mutism, defying all my efforts, and only very gradually learning to speak again.

Here we are dealing with a case of dissociation following a sudden emotional shock and affecting, apparently, a single function, speech. We are unable to conclude with any degree of certainty from the information given whether the dissociation had been preceded by repression. But it seems very likely that such had been the case. Every soldier who does not experience fear on the firing line must have repressed fear to some extent, since the situation could hardly be more fear-exciting. Now, if we assume that this sergeant had repressed his fear in the past, it is very probable that the sudden explosion of the bomb, arousing fear, resulted in an intense though brief emotional conflict. This resulted in the dissociation of the fear with respect to a certain form of its manifestation. In keeping with our deductions we should assume that had the fear found an unobstructed outlet in a loud cry, there perhaps would have been no dissociation. Yet we must frankly admit that for all we know at the present time, dissociation may result from a strong emotional shock without any previous repression.

It is interesting to note that dissociation seems to occur more readily in the extroverted than in the introverted person. Again we should expect this to follow from our concept of these two general types of personality. The introvert is more prone to self-analysis and reflection and consequently is likely to develop the more strongly knit

personality; he is more likely than the extrovert to search out the true motives back of his activities and to consciously weigh and evaluate these various aspects of himself. This results in the establishment of fixed bonds or connections between his various mental dispositions. The extrovert, as we have seen, is more prone to take over the concepts, values, and standards of others with relatively little analysis of them. This may readily result in many undetected inconsistencies, or incompatibilities, within his mental organization. Due to these inconsistencies his mental organization cannot assume the cohesiveness it otherwise would. Being somewhat loosely knit, it is the more subject, upon occasions of great emotional strain, to dissociation.

Before leaving the subject of dissociation it may be well to mention some examples of relative dissociation in the normal individual. The intoxicated individual is a good example of partial dissociation; his impulses express themselves as if they were in more or less isolation, as if they were rid of the mutually modifying influence which comes with integration. The person who is just recovering consciousness following anesthetization is a common example. His remarks are random; he is likely to say almost anything, regardless of the situation. Extreme fatigue often results in a partial dissociation while it lasts. An over-tired person is inclined to be "impulsive," inconsiderate of others, thoughtless of himself, and inconsistent in his thinking and behavior. This tends strongly to support the view of Janet,<sup>7</sup> to the effect that a certain amount of energy is constantly necessary to maintain the mental integration of the individual, and that if this energy is not forthcoming, dissociation naturally follows. Finally, extreme grief or anxiety is conducive to a state of temporary partial

<sup>7</sup> Janet, P., *The Major Symptoms of Hysteria*, pp. 332-337. Macmillan.

dissociation. The mother who has just lost her child, or who fears her sick child is going to die, may reveal unmistakable signs of mental dissociation; she pulls her hair, tears her clothing, laughs and cries, deploras the fact that she was ever born, and in the end may become unconscious.

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## CHAPTER VIII

### THE PSYCHONEUROSES

[NEURASTHENIA OR ANXIETY NEUROSIS]

**The General Nature of Mental Disorders.** The extreme complexity of the individual's social environment demands of him different modes of reaction to different situations if he is to be adjustive in his activity. Now every mode of reaction to difficulties which we have discussed in the last three chapters possesses adjustive value, provided the individual resorts to it at the proper time and in the proper situation. On the other hand, any one of these different modes becomes nonadjustive in a situation to which it is not suited, or when it is carried to an extreme, or when it is applied indiscriminately to situations in general.<sup>1</sup> Hence we see that adjustive and nonadjustive reactions are not two separate classes of reactions; they are all reactions to difficulties, and the degree to which any mode of activity is adjustive or nonadjustive must always be determined in relation to some specific difficulty. True, some of the modes of reaction to difficulties which we have discussed are in general more adjustive than others, but the fact remains that in a given situation any one of them may be either adjustive or nonadjustive. Conse-

<sup>1</sup> Trial and error reactions are a possible exception. But even these may prove nonadjustive if too lacking in persistency. On the other hand, even repression and dissociation have a definite adjustive value from the standpoint of society if not from the individual's point of view. But here also dissociation occasionally becomes an adequate means of adapting to a difficulty, as, for instance, when the grief-stricken mother succeeds in giving complete expression to her feelings, becoming temporarily dissociated in doing so.

quently when we speak of nonadjustive reactions we shall mean nothing more than that the reaction is nonadjustive with respect to the situation to which it is made. We must also try to keep in mind the fact that there are two general points of view from which we may evaluate a given reaction or mode of activity: society's and the individual's. From his own point of view the burglar's activity may be ever so adjustive; from society's point of view it is definitely nonadjustive.

When an individual tends to persist in and to carry to an extreme any one or several nonadjustive modes of activity, we may speak of his having a mental disorder. Hence in mental disorders (functional disorders) we are not dealing with any pathological condition of the nerve tissue or with any other physical structure of the individual; we are dealing always rather with an excessive amount of nonadjustive activity. In a very broad and purely descriptive sense a mental disorder may always be viewed as an habitual nonadjustive mode of reaction to difficulties.

The abnormal individual, the individual with a mental disorder, may be characterized by a single mode of nonadjustive activity to a specific difficulty, or he may be characterized by two or more types of nonadjustive activity either to a single difficulty or to many difficulties. Most cases of mental disorder cannot be reduced to a single mode of reaction. Or, otherwise stated, in most cases certain of the individual's abnormal reactions can be understood best in terms of one mode of reaction (for instance, compensation) while others can be more profitably viewed in relation to some other mode (for instance, repression), etc. Again, most abnormal individuals are reacting nonadjustively to more than one difficulty. Either there has occurred a blocking of various urges,

resulting in various trends of nonadjustive activity, or of a single urge with respect to different types of situations; and this has led to different nonadjustive trends of activity.

Functional mental disorders, or simply functional disorders, may be roughly classified into two large groups, the *psychoneuroses* and the *psychoses*. Although there appears to be no absolute distinction between the two groups, they can nevertheless be quite easily distinguished from various points of view. The psychoses constitute the so-called "insanities" and in general are institutional cases. The psychoneuroses, on the other hand, comprise a much larger class of mental maladjustments and are encountered far more frequently outside of mental hospitals than within. This indicates that the psychoses are more serious or severe. In a certain sense this is true; the psychotic patient is far less in contact with his objective environment than the neurotic and is correspondingly less responsible in a social and legal sense for his actions. This distinction together with others will become clear later.

In abnormal psychology it is customary to speak of a nonadjustive and more or less persistent reaction to a difficulty as a *symptom*. The many symptoms which characterize mental patients in general have been grouped into various *symptom-complexes* or *mental syndromes*. Such grouping has come about as the result primarily of two facts. First, it has been observed that certain symptoms are almost invariably found together; that is, in the same patient, and from this it is inferred that there is some kind of definite relationship between them; either they belong to the same sequence of events or they are the result or manifestation of the same basic disturbance. Secondly, certain symptoms bear a fundamental similarity to each other and for this reason are placed together.

When for either or both of these reasons various symptoms are grouped together they constitute a symptom-complex or what we might better designate as a *nonadjustive reaction-picture*, implying by such a term that the various reactions are more or less definitely related to each other in such a manner as to form a coherent or unified picture. The different nonadjustive reaction-pictures which have been distinguished are currently called psychoneuroses (or neuroses) and psychoses. In actual practice one encounters mixed forms (reaction-pictures or *clinical forms*) much more frequently than pure types. Nevertheless, for the sake of clearness, we shall discuss the psychoneuroses and the psychoses as if the unmixed form or reaction-picture were the rule rather than the exception.

**Some General Facts about Neurasthenia or Anxiety Neurosis.** Some writers distinguish two disorders, one of which they call neurasthenia, the other anxiety neurosis (or anxiety hysteria). It is the present writer's opinion, however, that such a distinction has no substantial justification in fact, that the major symptoms of the two are usually found together and that they are manifestations of the same personality-disturbance.

Neurasthenia is by far the most common of all mental disorders. Perhaps a conservative estimate of its frequency would be eight to ten per cent of the total population. One well-known writer says that we all pass through neurasthenic phases at one time or another.<sup>2</sup> But of course we must distinguish between the individual who is occasionally neurasthenic and the person who is more or less permanently neurasthenic. Only the latter would be placed in the psychoneurotic group.

Not only is neurasthenia the most common mental disorder but it is the least removed of all from normality.

<sup>2</sup> Myerson, A., *The Psychology of Mental Disorders*, p. 59. Macmillan.

As Pressey <sup>3</sup> and others point out, it is really a borderline condition between normality and abnormality.

**Symptoms of Neurasthenia.** The most frequently mentioned if not the most common symptom is a *feeling of extreme fatigue*. Indeed, it is from this symptom that the disorder gets its name; it means literally diminished nervous energy, nervous exhaustion. The fatigue of the neurasthenic appears to differ in certain essentials from that of the normal individual. In the case of the former the fatigue is often reported to be actually greater in the morning than at night; rest has little if any effect upon it; the fatigue is fairly constant throughout the individual's waking hours; if we give the patient's reports a literal interpretation, his fatigue is much more intense or exaggerated than that of the normal person. By means of a specially devised instrument, Hartenberg <sup>4</sup> endeavored to determine the basis of the neurasthenic's fatigue. He was able to prove, at least to his own satisfaction, that it is not peripheral in origin; there is no condition of toxicity in the muscles and peripheral nerves which can be correlated with it.

A second symptom, almost as characteristic of this disorder as fatigue, is *headache*, frequently associated with eye-strain and blurred vision. Like the fatigue, the headache tends to be fairly constant, or at least of frequent periodic occurrence, and undoubtedly often becomes very intense. The patient usually goes from one physician to another and, failing to obtain relief, finally resorts to patent medicines. One such patient of the writer's acquaintance consumed a stock bottle of bromo seltzer weekly. Incidentally, she suffered considerably from gastric disturbances!

<sup>3</sup> Pressey, S. L., and L. C., *Mental Abnormality and Deficiency*. Macmillan.

<sup>4</sup> Hartenberg, Paul, *Treatment of Neurasthenia*, Chap. 3. Frowde, Hodder and Stoughton.

The neurasthenic is often troubled with *aches and pains in every part of his body, but particularly in the back*. He perhaps comes to believe that he has a floating kidney and is surprised that his physicians do not recognize the fact. Or he may tell you that he inherited the condition, that his mother was the same way. Occasionally the pains closely resemble rheumatic disturbances, affecting the joints and extremities.

Most patients of this class are troubled more or less with *digestive disorders* which may take any one of many forms. Many patients are often nauseated and have spells of vomiting before as well as after eating. Others suffer from gastric pains and abdominal cramps. One woman was placed on an egg and milk diet for a number of years and finally reached the point where she could not take even milk without suffering considerable pain. *Constipation*, also, is a frequent condition in neurasthenia.

The neurasthenic is troubled not only with digestive disorders but usually with *loss of appetite*. It is frequently observed that he is unduly skeptical concerning food. He may erect a rigorous classification of foods: some he must not eat under any considerations, others occasion him only a certain amount of discomfort, to a third class he is quite indifferent, while still others agree with him unusually well. In addition to this he may tell you that he can eat only certain combinations of foods.

*Insomnia* is a very common neurasthenic symptom. It may take any one of several forms, but usually it consists of an inability to fall asleep upon retiring. According to the reports of these patients they lie awake for hours, sometimes till morning, before they are able to sleep. And when they do finally fall asleep they are likely to be disturbed by unpleasant dreams. Others report that they have very little difficulty in going to sleep but that after

an hour or two they awake and find it impossible to sleep again. Still others complain of fitful sleep, sleeping for only a few minutes or possibly for an hour in between much longer periods of wakefulness. It is highly probable, however, that every true neurasthenic is inclined to exaggerate the extent of his insomnia.

Some neurasthenics complain of various *peculiar subjective sensations* (paresthesias). Common among these are ringing and buzzing sounds (akoasms) which the patient localizes in the ears. Such sensations are invariably very persistent and possess an unusually high value for attracting and holding the patient's attention. In other words, the patient is unable to adapt to them as the normal individual is to continuous sound stimuli. One patient, shortly to be mentioned in some detail, held a man's watch to her ear in order to drown out her akoasms even while riding on the subway train.

The remaining neurasthenic symptoms to be mentioned are somewhat more general in nature than those which we have given. The first of these is a *general hyperesthesia*, an extreme degree of sensitiveness to stimulation. This is particularly marked, however, with respect to light and noises. The slightest sound is likely to be an irritant to the patient. It is perhaps largely this matter of hypersensitivity which has given rise to the popular notion that neurasthenia is primarily a matter of "nerves." For the patient constantly complains of the noises on the street, the victrola next door, the creaking of the floor, the running water in the next room, the bright light, the glare of the sun. There is no positive evidence, however, that the neurasthenic actually possesses a hyperacuity of vision or audition, that he can actually hear better or see better than the normal person. Rather it is a matter of increased distractability; these patients find it extremely

difficult to concentrate their attention and correspondingly difficult to ignore relatively insignificant stimuli.

Along with the neurasthenic's distractability there is invariably found extreme *irritability*, *depression*, *pessimism*, and *hypochondria*. The patient is irritable not only with respect to distracting stimuli but in relation to everything with which he is concerned. Any change in the household routine irritates him as does any unexpected event or change, new customs, new styles, changes in the weather, etc. He is also subject to depression a good part of his time and customarily views life through blue glasses. Many of these patients become excessively concerned about their own health, mental or physical, and then we speak of them as being *hypochondriacal*. One patient told the writer that she sincerely believed herself to be the most nervous, miserable, and unfortunate person in the world. And yet this patient was young, fairly attractive, financially independent, and had no physical defects or organic disorders.

The last symptom of neurasthenia to be mentioned is *anxiety*. Although a more prominent feature of the symptomatology of some patients than of others, this symptom is perhaps always present in some degree whenever we are dealing with a true case of neurasthenia. If the anxiety becomes largely directed by the individual to his own health, we have a condition of true hypochondria. Usually, however, the patient is anxious not only about his health but about most matters which have any personal bearing upon him. Thus he (or she) will often be found to be anxious about his clothes, about financial matters, his children, about certain habits which he has formed or thinks he is going to form. If the patient has ever masturbated or engaged in other sexual activities during his youth he is likely to believe that these practices have

resulted in some very definite injury either to his physical or mental health or to both, and that his aches and pains are but an after-effect thereof. These (usually imaginary) injuries which he has done himself cause him constant anxiety and worry and he looks with the extremest pessimism upon any possibility of a remedy.

The neurasthenic's anxiety does not always become attached to any definite aspect of himself or his environment. Rather it may be of the nature of a "free-floating" anxiousness which the patient is unable alike either to overcome or to account for. To him it may be like feelings of impending disaster, a feeling that something dreadful is going to happen, but he may have no idea of what this something is.

The symptoms which we have mentioned are the principal nonadjustive reactions of the neurasthenic patient. And, given a patient in whom all these various symptoms were present, we should then have a fairly complete non-adjustive reaction-picture, an ideal type of this particular form of mental disorder. While most neurasthenic patients do not manifest all of these different symptoms, there are a few who closely approximate the ideal type. The following example taken from the writer's own experience is a case in point.

CASE 7. An unmarried woman, age 26, complained to the writer of the following symptoms: She suffered extreme fatigue, particularly in the morning, and found it quite impossible to sustain effort in a given direction for any length of time. She complained of being frequently nauseated in the morning, of a poor and very irregular appetite, of indigestion ("sour stomach," "gas," gastric and abdominal pains), and constipation. She was troubled by frequent headaches; and eye-strain and blurred vision preventing her reading even the headlines in the newspapers. Severe pains in the back and legs made it impossible for her to sit, lie, or stand in comfort. She had "ringings" and "buzzings" in her ears and in order to drown

these distracting and highly unpleasant noises she carried a man's watch which she held to her left ear. She complained of being extremely nervous and distractable and was very irritable, becoming immediately exasperated at the sound of a slamming door, footsteps in the hallway, and even the noises on the street. Finally this patient was in a constant state of anxiety particularly concerning her health and physical appearance. And, as is usually the case, she stated that she was unable to sleep on account of her illness. She explained that her aches and pains and akasms kept her from getting any rest and that the need of rest kept her from regaining her health and left her in a continuous state of fatigue.

So far we have sketched the more common nonadjustive reactions of the neurasthenic individual. We have yet to discover the nature of the difficulty to which the patient is making these reactions and then to identify the reactions with some one or several of the different modes of reaction to difficulties discussed in the previous chapters. But before doing this it is essential that we make brief note of the general personality-make-up of this type of patient.

**The Neurasthenic Personality.** It appears that the consensus of opinion is coming more and more to be that neurasthenia develops usually, if not always, in the more introverted type of personality. Whether or not this is true, we can at least say that along with a condition of neurasthenia we always have a strongly introverted trend. In other words, we find that the neurasthenic is always greatly concerned about himself. It might seem to the reader that this would necessarily be the case; that if an individual has aches and pains, is unable to sleep, has very little appetite, is tired, etc., he will inevitably pay a great deal of attention to these facts. But we shall later show that the neurasthenic's symptoms are undoubtedly more truly reactions to some difficulty than they are *the* difficulty, that they are of a psychological

rather than of a physical origin. Moreover, we shall learn in a later chapter that an individual may have very severe symptoms and yet be quite unconcerned about them. These facts tend to indicate that in neurasthenia we are dealing first of all with a strongly introverted trend which is a necessary basis for the particular symptoms (reactions) manifested, inasmuch as it predisposes the individual to an excessive self-concern.

It will be recalled that we pointed out that as a result of the introvert's tendency to draw a hard and fast distinction between himself and the objective world, including other individuals, and as a result of his proneness to self-reflection, he is suspicious of the motives of others; he is antagonistic to any influence which another person may have upon him; he offers definite resistance to the commands and suggestions of others; and he has a proneness to react in a very personal manner to other individuals. In the normal introvert these tendencies become expressed in a bluntness of speech and manner, an inconsiderateness of others' feelings, radicalism in views concerning politics, morals, religion, etc. In the neurasthenic these same tendencies may manifest themselves in a more pronounced manner, as may be illustrated by reference to the case cited (Case 7). This young woman was openly suspicious and antagonistic (negativistic) from the very beginning in her consultations with the writer. Any remark of the latter which could possibly be misconstrued in such a manner as to reflect unfavorably upon her was so interpreted. This tendency was carried to an extreme. On one occasion, for instance, the writer requested her to sit in a chair which was four or five feet removed from the one she was occupying. She immediately demanded to know the reason for the request, and when it was given, it did not satisfy her. She became

quite suspicious and subjected the writer to a rigorous cross-examination before finally yielding, with very poor grace. Although strongly denying it, this patient was constantly on the alert to catch the writer contradicting himself, whereupon she would immediately endeavor to gain an admission from him that he had been wrong. At such times, particularly when the writer was reluctantly admitting an error or misstatement, she would seemingly forget all about her symptoms, discard her watch, and assume an attitude and expression of animation which was in striking contrast to her customary pained and dejected bearing. But whenever the argument would take a sudden turn in favor of her "opponent" she would at once retrench, begin to complain of her terrible aches and pains, of her fatigue, the awful noises in her ears; and snatching up the watch, she would sink back dejectedly into her chair. To the extent of the writer's experience, an attitude of antagonism and resentment toward some individual or toward mankind in general is always to be found in the neurasthenic patient.

Another aspect of the neurasthenic's introverted trend is the tendency to talk to excess about his symptoms, his troubles. He will talk for hours without cessation about his ills to any sympathetic listener, and the more sympathetic and mystified the listener, the more the patient will talk. Then, upon a second occasion, the patient will say the same thing all over again, and the same the third time, and so on without end. In fact, many of these patients make no objection to paying for treatment as long as they are permitted to do most of the talking and to talk about themselves; but if requested to talk less and listen more they may readily become skeptical of any benefit to be derived. Not only are they inclined to talk a great deal about their symptoms but they resort to all kinds of means

in order to impress their listener with the seriousness of their troubles. The patient referred to above asked upon her first consultation if she were not the "worst case of nervousness" the writer had ever seen. When assured that she was not, she became obviously offended and continued unusually antagonistic to the end of the consultation. This tendency of the patient to try to impress his doctor or physician with the unusual seriousness of his case, together with the resistance which he so often manifests to treatment, has led many writers to declare that the neurasthenic does not want to give up his symptoms. It is our belief that in a certain sense this statement is true. We might say that the patient both does and does not want to give up his symptoms. Reasons for such a view will be given shortly.

**The Nature of the Difficulties to which the Neurasthenic Is Reacting.** If the neurasthenic's symptoms are nonadjustive reactions to difficulties, we can hope to understand their true significance only after discovering these difficulties, and the discovering of these difficulties is equivalent to discovering the causes of the symptoms. To the extent to which we are able to do this the neurasthenic's nonadjustive reactions should take on a specific meaning, and if they are all reactions to the same difficulty or to the same class of difficulties we should be able to discern some definite relationship existing among them, which should result in our obtaining a more or less unified nonadjustive reaction-picture, a symptom-complex.

We shall distinguish two general difficulties in the case of the neurasthenic. We may arbitrarily label these *primary* and *secondary*, or to speak in terms of causes we should call them, as is customary, *predisposing* and *exciting*. We shall discuss these separately and in the order mentioned.

We have already pointed out that we always have in the neurasthenic an introverted trend, and we have further assumed that neurasthenia develops only in the individual who is at the time more or less introverted. And in an earlier chapter (Chapter III) we concluded that introversion develops fairly early in life as a result of certain types of environmental influences. Since the introvert is inclined to pit himself against all other individuals, against the world in general, he is much more likely than is the extrovert to view his past life essentially as a matter of failures. And being introverted he reacts to failures in a very personal manner; he views his failures as a result of personal deficiencies or limitations. In the chapter dealing with compensatory activity we pointed out that repeated failure results in the development of an inferiority complex. *Now it is our conviction that every individual with neurasthenic symptoms has a very definite and strong inferiority complex with respect to some one, several, or all aspects of his social environment, and that this complex constitutes the primary difficulty of the neurasthenic, that it is the predisposing cause of neurasthenia.*

We have discussed in some detail in an earlier chapter the inferiority complex and in general the way in which it incapacitates the individual in adjusting to his environment. We shall analyze it anew in the light of the neurasthenic picture. The concept of the inferiority complex would have no significance whatever were it not for our assumption that in every individual there is a strong innate disposition which inclines him to self-assertive activity, to strive for the recognition and esteem of other individuals and also of himself. Note the boy who throws a stone farther than his companion is able to or who climbs higher in a tree. He not only immediately manifests pleasure and satisfaction at his accomplishment but he calls

the attention of others to it; he wants them also to recognize the fact of his achievement. A large part of the average individual's everyday activity is fundamentally similar to the aggressive, competitive activity of the two boys. A unit of such activity, assuming success on the part of the individual, might be briefly illustrated as follows:

Difficulty—arousal of self-assertive urge—  
trial and error activity—success—increased self-confidence and self-esteem, satisfaction.

On the other hand we have seen that if the individual fails in his aggressive and competitive activity, feelings of inferiority and incompetency result, partly from the fact of his having failed and partly from the fact that failure never calls forth the favorable recognition of other individuals. Indeed it frequently arouses in other individuals an attitude of superiority which, if directed toward the individual who has failed, is taken by him to imply his own inferiority. We may illustrate a unit of aggressive or competitive activity, assuming failure on the part of the individual, as follows:

Difficulty—arousal of self-assertive urge—  
trial and error activity—failure—loss of self-esteem and self-confidence, feelings of inferiority, dissatisfaction.

Now if during the earlier years of life the individual's environment is such as to cause him repeatedly to fail in his competitive activities, then there slowly occurs exactly what apparently happens in all so-called habit formation, namely, the intermediate steps in the individual's sequence of reactions to difficulties drop out and the end-reaction is the first and only one made. In other words, a definite sentiment (aspect of the sentiment of self-regard) is developed in relation to the class of difficulties in which

he has repeatedly failed; and this sentiment (inferiority complex) is like any other sentiment in that it immediately determines the nature of the individual's reactions to those situations to which it relates. Hence with the development of the inferiority complex, trial and error reactions become eliminated and the only reactions made are the feelings of inferiority, incompetency, dissatisfaction, etc. Upon the individual's encountering the type of situation with relation to which his inferiority complex has been developed, we have:

Difficulty—arousal of self-assertive urge—  
 arousal of inferiority complex—feelings of inferiority,  
 etc.

The feelings of inferiority which result from the arousal of the complex are definitely antagonistic to any expression of the self-assertive disposition with the result that the latter is blocked. This antagonism between these two dispositions constitutes a mental conflict which may be expressed as a conflict between the desire to succeed and the fear of failure. To the extent that the fear of failure (which may always be expressed as feelings of inferiority, lack of self-confidence and self-esteem, etc.) becomes strong, to a corresponding extent will the individual give up all attempts to succeed by attacking his difficulties in a direct and aggressive manner. Rather, the greater part of his activity will be in the direction of keeping himself from failing, from appearing in an unfavorable light.

It should now be clear why the neurasthenic individual tends to react in a very personal manner to the remarks and actions of those about him. His first and greatest concern being to keep himself at all times from appearing inferior, from appearing as a failure both in his own eyes and the eyes of others, he cannot help but search the re-

marks and actions of others for possible reflections upon himself. Hence in his general attitudes and reactions he is on the defensive rather than the offensive. He is like the invading army which, upon encountering a greater force than it expected and receiving a severe blow to its self-confidence (morale), turns all its efforts in the direction of keeping from being overcome rather than in overcoming its adversary.

The inferiority complex of the neurasthenic accounts, we believe, not only for his guarded attitude, his antagonism, suspicion, and resistance to the influence of others but also for the constant highly emotional state which characterizes him. Over and over his self-assertive disposition is being aroused and just as often blocked by his feelings of inferiority and incompetency. Thus there is present an almost continuous condition of mental (emotional) conflict, which frequently becomes so intense and causes the patient such keen distress as to result in his withdrawal from the scene of activity, seclude himself in his room and there fret day after day over his symptoms. Many writers point out that the neurasthenic reacts more emotionally than other individuals. In a sense this is undoubtedly true. He reacts more emotionally in a subjective sense; that is, he feels more deeply about those things which have a personal significance. But this, we believe, is the result of his emotions finding no adequate outlet in overt activity. The neurasthenic, or the strongly introverted individual with an inferiority complex, is literally afraid to give way to his emotions and impulses simply because to do so would be to risk appearing in an unfavorable light. This type of individual is always afraid that he might "make a fool of himself."

This inferiority complex together with its inevitable consequences always constitutes, we believe, the back-

ground of the neurasthenic picture. Aside from his specific symptoms we always have in the neurasthenic an individual who is more afraid of failure than he is desirous of further success; an individual who is therefore unduly sensitive to the actions of others, who maintains at almost any cost a carefully guarded attitude toward others lest they should perceive the deeply felt incompetency and lack of self-confidence within; an individual who views life as an uphill struggle and who as a result of failure or threatened failure has come to assume a defensive and resentful attitude toward his environment. And these basic aspects of the neurasthenic's personality which we have sketched we look upon as the primary difficulty to which his symptoms are but attempts to adjust.

An inferiority complex, we have seen, leads to compensatory activity. And compensatory activity is always of a kind different from that which the individual would have tended to engage in had it not been for failure, or imagined or threatened failure, and the consequent development of an inferiority complex. Now if an individual is reasonably successful in compensating for his incompetencies, he may have little difficulty in making a satisfactory adjustment to life's problems. He avoids certain types of situation and activities but enters successfully into others. But, given the type of individual which we have sketched in the preceding paragraphs, if something arises which either makes his present compensatory activity impossible or renders it useless or highly unsatisfactory, the individual may readily develop any one or several of the different neurasthenic symptoms which we have mentioned. For example: We have a young woman who is strongly introverted and who has a strong inferiority complex with respect, let us say, to life-situations in general. She meets and marries a man who has plenty of self-confidence, is

aggressive, and who is making a very good success of life. She compensates largely for her own feelings of inadequacy and lack of self-confidence by leaning heavily upon her husband for moral support. Then her husband dies, at the end of ten or fifteen years of married life. The woman is left without her customary means of compensation and develops neurasthenic symptoms. We may speak of *her husband's death as the exciting cause of her neurasthenia* or we may speak of *her strongly aroused feelings of incompetency to face life alone as the secondary difficulty to which she shortly comes to react in a neurasthenic manner*. Another example: A man who developed while a boy a strong inferiority complex with respect to competitive situations of a physical nature became, upon reaching maturity, a bookkeeper. He tended to compensate for his feelings of inferiority by an over-conscientiousness in his work; he prided himself upon the extreme care and exactness with which he discharged his duties. After holding the position for fifteen years he lost it to a more aggressive individual. This incident aroused his feelings of inferiority so strongly that any further self-assertive (aggressive) activity along the same line was completely blocked; he could not summon up sufficient courage even to apply for another position. Definite neurasthenic symptoms soon developed.

We believe that both the predisposing and the exciting causes, both the primary and secondary difficulties, must always be taken into consideration if one is to understand the neurasthenic, and the origin and significance of his symptoms (nonadjustive reactions).

**The Origin and the Significance of the Neurasthenic's Symptoms.** We have concluded that in the case of the neurasthenic we are always dealing with an individual who was already predisposed to develop neurasthenic reactions upon the occurrence of an exciting cause. And we have

indicated that the exciting cause is always of such a nature as to rob the individual of his previous mode of compensating for feelings of inferiority and inadequacy. Hence with the occurrence of the exciting cause the individual is thrown back into an intensified state of emotional conflict. He worries and frets, and since he cannot rid himself of the general feeling that he has failed or that he is incompetent and incapable of meeting the problems of life, he naturally becomes greatly concerned about himself. Along with this concern we must assume that he is on the alert for any fact which might be legitimately interpreted as a cause of his lack of success. Being introverted and therefore having his attention largely upon himself, he is not likely to find any excuse for his failure in his objective environment; moreover his feeling of inadequacy inclines him to look for the reason in himself. His constant worry and depression begin to affect his digestion and he is soon troubled with gastric and abdominal pains. His everlasting state of mental conflict brings about a feeling of exhaustion; as a result of these emotional factors he is unable to sleep, his appetite becomes poor and erratic, he grows irritable as he sees the time passing and his troubles becoming daily worse. He slowly becomes more resigned to his lack of success or to the event which precipitated his general emotional disturbance, but along with this he gradually becomes more and more concerned about his aches and pains, his insomnia, his fatigue, his loss of appetite, etc. These ills are gradually coming to have a very definite meaning for him; he succeeds in forgetting that they followed upon some failure or disappointment or else he fails to see any causal connection between the two, *and so he now begins to attribute to his symptoms his inability to meet the problems of life.*

Having reached this point, our individual has become a

true neurasthenic. His symptoms now have a very definite value for him; they provide him with a new means of compensating. We may simply point out that the individual who is ill does not feel called upon to take an active part in life's affairs. But if the neurasthenic's symptoms are to provide him with a legitimate excuse for not attacking new problems and thereby proving his competency, *if he is not going to come into disrepute among others and be lowered in his own eyes, he must make the most of his ills*. Consequently we find him greatly exaggerating his aches and pains, his insomnia, and all the rest. In order to impress upon others the seriousness of his condition he feels the need of talking incessantly about his troubles. Also, when we view his symptoms primarily as compensatory devices we are in a position to understand his resistance to treatment and his antagonism toward any one who presumes to belittle his sufferings. Likewise it becomes understandable that the patient should want both himself and others to believe that he is the greatest sufferer in the world. In the first place this would put him in a position of some distinction (to be the most unfortunate person living), and secondly, the more seriously he and others take his ills the better his excuse for not assuming obligations and a competitive part in life.

But the neurasthenic becomes to a large extent the victim of his own compensation. The reader must not suppose for a moment that the patient has no ills, that he merely pretends to have them. From a psychological point of view at least, his ills are just as serious as he contends they are. We have assumed that there is a physical basis for his aches, pains, indigestion, fatigue, etc., as a result of his general emotional disturbances. The patient then becomes over-concerned about his ills and this very concern results in an exaggeration of them. As they be-

come more pronounced the patient's concern is naturally increased and so we get what is appropriately known as the "vicious circle of neurasthenia."

But although there is perhaps an organic disturbance which serves as a starting point for most of the neurasthenic's symptoms, the reader should bear in mind that the view which is here being put forth is that the symptoms become really serious only because they provide the individual with a seemingly legitimate excuse for not coping with the difficulties of his social environment, that they are essentially attempts to compensate for a basic feeling of inferiority. There are various facts which lend considerable support to such a view. Many neurasthenics lose their symptoms upon reaching a fairly advanced age. Since it is then too late to take an active part in life and attempt to prove his worth, the individual no longer has any need of his symptoms. Again quite a number of women develop neurasthenia following the marriage and departure of their last child. This leaves them without their customary method of achieving a feeling of worthwhileness; they no longer have any one to work for and look after. Finally, subjective sensations such as akoasms are understandable only as compensatory reactions, protests against the assumption of obligations, since invariably no organic basis can be discovered for them.

There is yet the matter of the neurasthenic's anxiety. The other symptoms all seem to belong to a single class, to comprise a nonadjustive reaction-picture, to be compensatory reactions to a certain type of difficulty. But there is some question as to whether we can view anxiety merely as a compensatory reaction. It seems probable that the anxiety is an inevitable result of the continuous conflict between the feelings of inferiority and the self-assertive urge; that it is not a compensation but rather a

persistent state of apprehension resulting from the patient's feeling of helplessness in face of the world of cold reality. Always lurking within him is a desire to get rid of or to forget his symptoms and attack anew the difficulties of life; but to try has come to mean to fail and his over-strong tendency to shrink from failure reveals itself in part as a state of morbid anxiety. The neurasthenic reminds us somewhat of the individual on a sinking ship. To remain on the ship in the hope that something will happen to save him is at best not very hopeful and promises defeat in the end; but to jump into the water and swim for land is still worse and means almost certain failure. The ship is the neurasthenic's symptoms to which he tenaciously clings while he hopes; the water is the matter-of-fact everyday world from which he shrinks in fear. Thus he continues "between the devil and the deep sea," anxious and fearful and making the most he can out of his symptoms.

**Concluding Remarks.** We have seen that neurasthenia presents a fairly coherent nonadjustive reaction-picture. And since the neurasthenic's symptoms are specifically of a compensatory nature, we may characterize them as persistent nonadjustive compensatory reactions to difficulties. And we are now in a position to understand, among other things, the tendency of this type of patient to offer, and to over-emphasize as reasons for his illness, facts in his past life. For instance, to the extent that the patient is able to convince himself by means of rationalizations that his early masturbatory practices did him some irreparable damage which has resulted in his present illness, to a like extent will he feel unobligated to engage in normal competitive activities with other individuals. But to maintain this illusion he must make the utmost of his symptoms, his ills, and this he does by forever concerning himself with them and telling others about them.

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## CHAPTER IX

### THE PSYCHONEUROSES (*Cont.*)

#### [PSYCHASTHENIA: OBSESSION AND COMPULSION NEUROSES]

**Introductory Remarks.** In the last chapter we studied a certain group of abnormal reactions which we concluded to be reducible to a common denominator; that is, although we found that the reactions (symptoms) themselves differed considerably from each other, we came to the conclusion that they had a common cause, namely, strong feelings of inferiority and an intense fear of failure. Consequently we were able from an etiological standpoint to group these various reactions into what we called a nonadjustive reaction-picture. At the same time we found that a given neurasthenic reaction might exist either together with or in the absence of other such reactions and, furthermore, that an individual might react in a neurasthenic manner only to certain types of situations. In the present chapter we shall consider a second group of abnormal reactions which, we shall find, are even less closely related than those of the last chapter. Yet there are certain fundamental similarities among them and consequently we shall find it possible to view them, when taken together, as a second general type of nonadjustive reaction-picture. It may help the reader if we mention the fact, for instance, that organic disturbances naturally fall into general classes or groups; that the general characteristics of the disturbances (diseases) belonging to a given group are determined primarily by common effects

of these diseases upon the organic system as a whole, while the specific characters of the different diseases are determined by their own peculiar effects, usually upon some single organ or organic group. Similarly in the case of mental disorders, although all are disturbances of the personality, each one in addition to this is a disturbance of a particular aspect of the personality or it is a particular kind of disturbance.

The term "psychasthenia" was introduced by Janet who believed he had isolated a new type of mental disorder and one which could be most adequately designated by this term. Taken literally, psychasthenia means diminished psychic energy. We might merely mention at this point that Janet believes psychasthenia to result from a lack of the energy necessary to maintain a normal mental synthesis (integration); hence it may be understood as a weakened synthesis or partial disintegration of the personality.

**The Symptoms or Clinical Forms of Psychasthenia.** The chief types of symptoms (clinical forms) belonging to the psychasthenic picture are the *phobias, obsessions, compulsions, motor agitations, doubts and scruples, and feelings of unreality, depersonalization, and inadequacy*. These different nonadjustive reactions may be properly included under two headings: "obsessions" and "compulsions." Hence, they are frequently spoken of as the obsession and compulsion neuroses. But since we are after all dealing with so many different types of reaction which superficially appear to be fairly distinct, we shall in turn describe each and suggest an interpretation of it.

**Phobias.** A *phobia* is a morbid fear. It differs from a normal fear in several fundamental respects: (a) it is usually more intense and paralyzing in its effect; (b) in the case of the phobia the stimulus which arouses it is not usually a normal fear-exciting stimulus; (c) the in-

dividual realizes that his fear (phobia), in view of the situation which arouses it, has no rational basis; and (d) usually he is able to exert little if any control over it.

Since phobias may pertain presumably to any aspect of the environment, it would obviously be a difficult matter to give an exhaustive classification of them. A few of the more common ones follow:

Acrophobia, fear of high places.

Agoraphobia, fear of open places.

Anthropophobia, fear of men or of some particular man.

Claustrophobia or clitrophobia, fear of closed places.

Ereutophobia or erythrophobia, fear of blushing.

Gynophobia, fear of women or of some particular woman.

Hematophobia, fear of blood.

Misophobia, fear of contamination.

Monophobia, fear of solitude.

Nyctophobia, fear of darkness.

Ochlophobia, fear of crowds.

Pathophobia, fear of disease or of some particular disease.

Phobophobia, fear of fear, fear that one will be afraid.

Toxophobia, fear of poisoning.

Zoöphobia, fear of animals or of some particular animal.

A careful reading of the following cases of phobias should lend concreteness to this particular type of abnormal reaction. The first two are summaries of cases reported by Bagby,<sup>1</sup> the other is taken from the writer's own experience.

CASE 8. A young woman of twenty had suffered from a severe phobia of running and splashing water since she was seven years old. Indeed her fear of running or splashing water was so intense that during the early years of the disorder it sometimes required the combined efforts of three members of the family to give her a bath.

<sup>1</sup> Bagby, E., "The Etiology of Phobias," *Journal of Abnormal Psychology*, 1922, Vol. 17; also *The Psychology of Personality* by the same author, pp. 44-48. Holt.

On one occasion she fainted at school because of the sound of the drinking fountain, and in riding on trains she found it necessary to keep the window curtain down lest she should see the streams of running water over which the train passed. She was wholly unable to account for her peculiar fear.

We are told that an analysis of the case revealed the origin of the phobia in an incident which occurred when the patient was seven years old. She, her mother, and an aunt went for a picnic. When the mother decided to return home, the little girl (patient) begged to be permitted to remain longer in the care of the aunt, whom she promised to obey. The two went for a walk in the woods and the little girl, forgetting her promise of obedience, ran away alone. Later the aunt found her wedged in between two rocks of a small stream with water falling and splashing over her head. She was badly frightened. After being extricated she expressed anxiety lest her mother should punish her for her disobedience; whereupon the aunt promised, "I will never tell." The aunt left the next morning and soon thereafter the phobia developed, continuing for thirteen years, when the aunt revisited the family. Upon hearing of the young woman's phobia, the aunt recounted the incident and, with the recall of it by the patient, the fear disappeared.

CASE 9. A man of fifty-five had been troubled since he was a boy by a strong fear of being grasped from behind. When on the street he felt impelled to glance over his shoulder to see if he was being followed; he was always careful to have his chair placed against the wall at social gatherings; he was unable to enter theaters or crowded places. He could not recall the origin of his fear and had no idea of its cause.

In his fifty-fifth year he returned to the town where he spent his boyhood. In looking up his childhood friends he discovered that one of them was still at the corner grocery. During their reminiscing the friend recalled how the patient had been in the habit of taking a handful of peanuts from a barrel in front of the store whenever he would pass that way; and how one day, seeing him coming, he hid behind the barrel and jumped out and grabbed him from behind just as the other reached into the barrel. The patient had screamed and fallen in a faint to the sidewalk. The patient succeeded in recalling the episode, following which the phobia disappeared, "after a brief period of readjustment."

CASE 10. A man of thirty-three came to the writer to be treated for impotency. At the first consultation he was able to shed no light upon the possible cause of this condition which, so far as he knew, had always been present. A few years ago he submitted to a surgical operation upon the advice of his physician but this had no beneficial result. An analysis of the case strongly suggested that his impotency was the result of a partially repressed fear of the opposite sex, particularly with respect to sexual intercourse. He readily recalled that he had been very shy around girls when he was in high school, but he believed he had quite outgrown this shyness. Later he was able to recall that when he was eight years old he had been discovered committing immoral acts with a little girl of his own age. His parents not only punished him for this but they apparently aroused a deep feeling of guilt or shame and of fear. Two or three years subsequent to this he was seduced by a cousin who was then a young woman. At the present time this patient feels quite at ease around women except when he attempts intimate relations; then he experiences a very definite fear (or anxiety) not of the woman nor of the act itself but rather that he shall not be able to accomplish the act.

Although less transparent than the other two cases cited, this seems to be a true instance of phobia. The fear apparently has become displaced from the matter of sexual activity to the ability to engage in such activity. The phenomenon of displacement of affect is by no means uncommon even among normal individuals.

These three cases should suffice to give the reader a fairly good notion of the general nature of a phobia. Our next object is to make note of any facts which seem to be characteristic of phobias in general and then to offer an explanation of these facts. From these cases we might infer that the origin of the phobia always lies in some episode during which fear has been strongly aroused. Indeed, this appears always to be so in the case of true phobias. Secondly, we observe that although the fear remains conscious in the sense that it is experienced anew upon each succeeding occurrence of the stimulus and

that the stimulus which arouses it usually remains the same in some essential aspect, the memory of the initial experience which involved the fear has been forgotten. Thus in Case 8 the fear was aroused, at least in part, upon the first occasion by the sound of running and splashing water and it was thereafter aroused by the same kind of stimulus, but the memory of the original experience had been forgotten. Thirdly, we observe that the individual is unable to reason himself out of his fear. Fourthly, a moment's reflection will strongly suggest that the forgetting of the original experience can hardly be explained in terms of the factors commonly employed to account for ordinary forgetting. This leads us, fifthly, to suspect that repression is involved. In fact, many cases of phobia can be understood only in the light of repression. We have learned in previous chapters that repression is always brought about by the sentiment of self-regard, broadly speaking, and therefore we should expect the sentiment of self-regard to be involved in some way in the genesis of the phobia. Bagby has suggested that there is always a feeling of guilt or shame associated with those experiences which give rise to phobias.<sup>2</sup> If this can be shown to be true, then we should have to conclude that the sentiment of self-regard is always involved since it is only from this aspect of the personality that such feelings can arise. Let us now attempt an explanation of phobias.

An individual has an experience in which fear and, let us suppose, a feeling of guilt or shame is strongly aroused. The feeling of guilt, being incompatible with the sentiment of self-regard, is repressed in the sense that the memory of the specific experience is repressed. Upon subsequent occurrences of the stimulus or situation, the emotion of

<sup>2</sup> *Ibid.*

fear only is consciously experienced simply because the feeling of guilt which really belongs to the emotion-complex has been repressed. But we have already seen that a repressed urge if kept from manifesting itself in a natural manner may find expression through other channels (mechanisms) and, furthermore, that channels which are being activated at the time are particularly likely to be usurped by the repressed urge. In keeping with this we might assume that the phobia is an expression not only of fear but also of a feeling of guilt. This would help to explain its unusual intensity and persistency since as long as an urge is repressed it is only partially and indirectly under the control of the personality. For only when its true significance is clearly understood by the individual, when it is properly integrated with the rest of the personality, is it subject to direct control. Moreover, this would account for the fact that the individual himself considers his phobia absurd; he sees no logical connection between it and its stimulus. This arises from two facts: (a) the individual has forgotten his original experience and is therefore unable to assign an origin to his fear, and (b) the phobia is in part an expression of a feeling of guilt, a fact which is in no sense recognized by the individual. Phobias are usually cured if the individual can be enabled to recall the original experience and clearly to perceive the exact significance of the various factors involved. This amounts to re-integrating the emotional complex with the rest of the personality.

**Obsessions.** *An obsession may be defined as mental activity of a persistent and fairly specific nature which the individual recognizes to be irrational but over which he has little or no control.* Many normal individuals have experienced at times an uncontrollable tendency to persist in thinking about something or to repeat over and over to

themselves the words of a song or some simple melody. This sort of thing is of the nature of an obsession.

Perhaps the most satisfactory classification of obsessions that has yet been offered is that of Morton Prince.<sup>3</sup> Prince classifies obsessions into four groups, as follows: (a) Those cases in which there is some manifestation, often vague, of emotion without, however, the individual's experiencing any emotion. An example of this class would be hysterical laughing and crying, quite common among adolescent girls. In such cases the individual laughs or cries without any experience of elation or depression and consequently without knowing why she laughs or cries. We shall consider this class of phenomena more in detail in the next chapter. (b) The second class includes those cases in which the individual both manifests and experiences an emotion but without any perception or recognition of the cause of the emotion. He feels happy or sad without knowing why. When the emotion concerned is fear or anxiety, the phenomenon is often spoken of as "anxiety neurosis."<sup>4</sup> (c) In the third class of obsessions Prince places the true phobias and similar emotional disorders. As we have seen, here the individual both manifests and experiences the emotion and is aware of the object or situation which arouses it. The stimulus, however, is not rationally an adequate cause of the obsession (phobia). (d) The fourth class of obsessions includes those cases in which the emotion is manifested and experienced and is quite in harmony with the stimulus or situation which arouses it. For instance, an individual is greatly depressed because, as she says and believes, she is going insane. Now if a person is convinced that she is going insane, a feeling of depression is a quite natural reaction to

<sup>3</sup> Prince, Morton, *The Unconscious*, Chaps. XI and XII. Macmillan.

<sup>4</sup> It is doubtful, however, if the neurasthenic's anxiety is similar in all etiologic and symptomatologic respects to the psychasthenic's anxiety.

this conviction. Obsessions of this kind are abnormal in that the cognitive factor (the belief in inevitable insanity, in the case just given) has no adequate basis in reality. In other words, such a patient believes, without sufficient reason, she is going insane. The reader may well venture the guess that in such cases we are always dealing with displaced affect; the patient is depressed not because she believes she is going insane, but because of something else of which she is unaware; she believes she is going insane because she is so depressed. In short, she rationalizes just as the patient in the mental hospital does who weeps because *she caused the World War*.

It would be far beyond the scope of the present text to give an exhaustive discussion of the interesting phenomena of obsessions. We shall have to limit ourselves to a discussion and suggested explanation of a few typical cases. The following case is quoted from Ross.<sup>5</sup> Only the essential features of his report are mentioned here.

CASE 11. A patient was obsessed . . . by the number thirteen. If he heard the word he felt a shock which was followed by a period of misery; he stayed in bed on the thirteenth day of the month and on the twenty-seventh, because the word "twenty-seventh" has thirteen letters in it. Everybody seemed to be saying thirteen at him in some way or another; thus they would say, "Oh, good morning," and with, as it seemed to him, a most perverse ingenuity, they would later in the day say only "Good afternoon." He worked near Oxford Circus, and lost time by not going through it because the words "Peter Robinson" were displayed prominently. On going up-stairs he would hop over the thirteenth step. Wherever he went, whatever he did, he was compelled to count the letters in the short phrases people used, to count the words in their sentences, to count his steps, the number of streets he passed, and so on. He gave so much time to the avoidance of the number that he had become totally unfit to do anything else, and his condition was truly one of great misery. He dreaded the number much as another might dread the street or a closed room.

<sup>5</sup> Ross, T. A., *The Common Neuroses*, Chap. XIV. Arnold, London.

An analysis of this case revealed, among others, the following facts. The patient recalled a girl whom he had known when he was a youth who was very superstitious concerning the number thirteen. He explained his obsession as being due to having her superstitions impressed upon him during a very susceptible age. At first he was unable to shed any further light upon his obsession. Later, however, he succeeded in recalling that he had had sexual relations with this girl, and that later he had become quite religious and had strongly disapproved of his former immoral acts. Thereupon his memory of these acts and the feeling of guilt which it occasioned became repressed.

When this patient came to Dr. Ross he was something of a moralist and the recall of his former sexual irregularities proved very much of a blow to him.

The same writer gives another case, herewith summarized, of obsession which is equally interesting and instructive.<sup>6</sup>

CASE 12. An ex-soldier was obsessed with a fear of tabes, which merely means that he believed he had syphilis. No amount of reassurance to the contrary had any effect. A study of his history showed that the occasion when syphilis might have been contracted synchronized with an act on his part "which could only be called one of cowardice." Although, to quote Dr. Ross, "It is not clear that he had altogether driven the memory of his military failing into the unconscious, *i.e.* below a barrier from under which it was incapable of recall," . . . "by dwelling on the disease his mind had been fully occupied, and he had been saved thinking of the other." When the patient was induced to face the real issue, the true cause of his depression and obsessive thoughts, there resulted a keen sense of shame, on account of his act of cowardice, but a disruption of the obsession.

Cases of obsession could be multiplied almost indefinitely, but the ones we have mentioned must suffice for the present. The reader will observe a strong similarity

<sup>6</sup> *Ibid.*

between these two instances of obsession and the cases of phobia previously cited. The chief difference seems to be that in the case of the phobias fear only was consciously experienced while in the obsessions the emotion was more complex, consisting of depression, anxiety, etc. Here as in the phobias the abnormality is traceable to some experience or series of experiences which resulted in a conflict, leading subsequently to repression of certain factors. In short, we must conclude that phobias and obsessions, at least of the particular type which we have mentioned, both belong to a single class of phenomena.

**Compulsions.** *A compulsion may be defined as motor activity of a persistent and fairly specific nature which the individual recognizes to be irrational and incongruous with the situation that arouses it but over which he has little or no control.* There is no fundamental difference between obsessions and compulsions. The former involve mental activity (dreading, wishing, thinking, imagining) primarily, while the latter involve some form of overt behavior. The following examples should make clear the basic similarity between the two phenomena.

CASE 13. A young man of twenty came to the writer complaining of a number of symptoms. Among these was the impulsion to wash his hands many times during the day. Associated with this impulsion (or compulsion) was a feeling that his hands were unclean. The compulsive habit was easily traced to masturbation, which always gave him a feeling of uncleanness and shame. He endeavored not to think of his masturbatory practices, to forget them; in fact to pretend that he was not guilty of them. After he had admitted the practice and clearly recognized its relation to his hand-washing compulsion, the latter disappeared.

The next example, adapted from Burt,<sup>7</sup> is a case of fetichism involving kleptomania. We might state here that compulsions include the entire list of manias.

<sup>7</sup> Burt, Cyril, *The Young Delinquent*, pp. 175-177. Appleton.

CASE 14. A fifteen-year-old boy was taken to task for stealing a watch and some money. When he was asked why he took the watch he replied: "I suppose it was the glass. I put my pen through it, and then smashed the works." When questioned as to the use he had made of the money, he said he wanted to pay for some glasses he had ordered. Further investigation disclosed the fact that he had collected fifty-four pairs of glasses. Some of the glasses he had found, others he had stolen. It appears that he was having a rather difficult time with his studies in school. This situation made him envious of those who were doing good work, several of whom wore glasses. He endeavored to compensate for his failure by a child-like attempt to identify himself with those who were successful. One way of doing this was to possess glasses, the more the better. His collection of glasses symbolized to him the acquisition of the mental ability of his superiors.

The following case is given by Stekel.<sup>8</sup>

CASE 15. Mrs. W. C., a 49-year-old mother of five children, is seized every morning by a torturing restlessness which impels her to talk without pause for an hour or two at a time. The flow of her talk is incessant. As her husband did not want to hear her out and she was afraid of appearing ridiculous in her servants' eyes, a relation of her housekeeper's, a young woman, was engaged for the sole purpose of serving as a lightning-rod-conductor for these daily morning storms. Regularly at half-past eight in the morning she rushes into the girl's room and begins to storm about her household troubles, her cares on account of the children, about her husband, the bad times, and keeps this up until she tires herself out in a two hours' harangue. Once she was ill with laryngitis and her physician forbade her to talk. She was compelled to run out of the house and roam for a couple of hours. Then she came home very much calmed. When the war affected adversely their financial condition, she agreed with her husband that the girl ought to be dismissed. At the prospect of having no one to listen to her mornings, the woman was disconsolate. Finally she prevailed upon her husband to have the girl retained after all. It is interesting that the daughter, too, got into this bad habit and tried to compel her mother to listen to her. The reason for the daughter's parapathy was her jealousy of the girl.

<sup>8</sup> Stekel, W., *Peculiarities of Behavior*, Vol. I, p. 19. Boni and Liveright.

Stekel finds the explanation of this compulsion (talking) in the following facts brought out by an analysis. The woman's sexual life was unsatisfactory, her husband leaving her unsatisfied; she experienced an impulse to glance at the genital region of men and believed this caused them to laugh at her; she had a further impulse to reach out and touch the genitals of men. These abnormal tendencies induced a feeling of guilt and shame and were therefore inhibited or repressed. A normal or adequate resolution of the feeling of guilt and shame which these tendencies occasioned would have been a frank confession of them, at least to herself—"Confession is good for the soul." Her incessant talk was thus a first step in this direction, and occasionally she did make abortive confessions. Hence her talking was motivated directly by feelings of guilt and indirectly by the impulses referred to.

One more case of compulsion is paraphrased from Frink:<sup>9</sup>

CASE 16. A young unmarried professional man of high morals and good education began quite suddenly to suffer from compulsive acts and self-reproaches. He purchased a hat one day but had hardly left the store before he was assailed with doubts and scruples as to whether he should have bought the hat. He started to return the hat but before he had reached the store a strong feeling that it would be wrong to do so came over him. He thereupon decided to keep the hat but was again assailed with the feeling that such a thing would be wrong. In the end he returned the hat. Another time he went to the bank for a check book. No sooner had he left than he felt that he had done wrong to get the book, that he must return it. One day a friend suggested that he join a certain regiment. Without thinking about it seriously, he replied: "Well, perhaps I will join before long." Soon after leaving his friend the thought came to him that he should not have said what he did to his friend. He could not rest until he had got in communication with his friend and retracted his words. Then it occurred to him that he should not have retracted his words, that he should after all join the regiment.

<sup>9</sup> Frink, H. W., *Morbid Fears and Compulsions*, pp. 172-176. Moffat, Yard.

In two or three days he got in touch with his friend and communicated to him his change of mind. Then the former set of reproaches returned so that still later he had to retract this decision, etc.

Although this young man was strongly devoted to his family at the time of these compulsions, an analysis revealed that when he was a small boy he had been subject to unusual fits of anger and rage, was jealous of his brother—whom he wished dead and once nearly killed in a fit of anger—and was inclined to be cruel toward other children. These tendencies had been strongly repressed because of the extreme disfavor with which they were viewed by his parents. Just previous to the beginning of his compulsions he had had an unhappy love affair which aroused considerable resentment not only toward his sweetheart but also toward his father. Thus the tendencies which had been repressed since childhood were aroused; he wanted revenge, he wanted to murder someone. Now his compulsive acts and self-reproaches take on a very interesting and plausible significance. The hat had a bow of red ribbon in the inner band; the bank book was red; in connection with his contemplation of joining the regiment, the thought passed consciously through his mind: "Suppose I join the regiment and there is a strike or a riot, for which the militia are called out. *Then I might kill someone.*"<sup>10</sup>

Dr. Frink's interpretation of this case, which appears plausible enough, is to the effect that two sets of forces or urges are concerned, one of which is repressed because of its incompatibility with the individual's sentiment of self-regard. The individual carries an old grudge, so to speak, toward his father, and later he bears a grudge toward his sweetheart. In keeping with his primitive nature he would like to murder them. This tendency is, of course, repressed. The red bow in the hat, the red checkbook, and the thought of killing someone in case of a strike or riot, all tend to be partial gratifications of the repressed tendency since they may all symbolically represent blood. Hence, since they represent blood, the shedding of blood, they are objectionable and give rise to feelings of self-

<sup>10</sup> The italics are Dr. Frink's.

reproach on behalf of the repressing forces. Thus the feeling of self-reproach may be viewed as an over-compensation or exaggerated protective reaction against the possible commission of a sinful act. At the same time, since the repression is not complete or adequate, the repressed tendency expresses itself in part by way of feelings of self-reproach for not keeping the hat, the checkbook, or for not joining the regiment.

The reader will have observed that as in the case of the phobias and obsessions we are dealing with tendencies or urges which, if manifested in their true form, would be incompatible with the sentiment of self-regard. They have therefore been repressed; consequently they express themselves in some unusual or abnormal manner. Since the form of expression which they assume is not as morally objectionable to the individual as their natural form of expression would be, they do not sufficiently arouse the antagonistic forces invested in the sentiment of self-regard to come under its control.

**Motor Agitations (Tics).** Not all motor agitations are of a psychasthenic nature or even of a functional nature. Hence, those to be discussed here constitute only a special group. *A psychasthenic tic is a more or less persistent contraction (twitching) of some muscle or muscle-group; it is but slightly if at all subject to the control of the individual and usually occasions a considerable degree of mental distress.*

Motor agitations may conceivably involve any muscle-group of the body, but they are most frequently found to involve the muscles of the face, eyes, mouth, and neck. A couple of examples will be sufficient to make clear the general nature of psychasthenic tics. The first case is quoted from an article by Mary Alden Hopkins,<sup>11</sup> the second example is taken from the writer's own experience.

<sup>11</sup> Hopkins, Mary Alden, *Child Study*, April, 1916.

CASE 17. When a little girl was seven years old, a queer habit of smacking her lips grew beyond control. At the same time she developed a curious way of walking. Her mother tried in vain to break her of these habits.

A doctor treated her for St. Vitus's dance. Under his care she grew much better, but the lip noises and jerkings would sometimes come back when she was tired or excited. After a while a psychoanalyst became interested in her. . . . Her analyst sought the reason why she smacked her lips and limped. He knew that to attempt to repress these outward signs without finding what lay behind them was like trying to stop a headache without knowing whether it came from the stomach or the eyes. The analyst picked her up on his knee and asked:

"Why do you smack your lips?"

She considered the matter with her head tipped on one side.

"I don't know," she replied; "I cannot help it."

"Of course you can't," agreed the analyst, "but it would be interesting to know why you do it. You know, there is a reason for everything."

At first she couldn't remember when the habit began. But the analyst had patience and tact, and knew a great deal about children. After a time she recalled the beginning. Two years before, her mother had told her the reason she must always have her window open at night was because she mustn't breathe the same air twice. When she breathed it in it was good air, but when she breathed it out it was bad air. She drew an unexpected inference from this lesson in hygiene. She thought that since she was forever making good air into bad she was injuring the air. "Perhaps," she thought, "I can kiss it well again, the way mother kisses my bumps well." Then began the funny smacking noises—little healing kisses to the air. The habit became automatic. It continued long after she had forgotten the reason.

Next the analyst found out about the stooping motion. She was afraid she hurt the floor when she stepped on it. Perhaps, she thought, if she touched it gently now and again the floor would understand how sorry she was. The analyst did not laugh at the child. He explained in simple words the chemistry of air and the senselessness of wood. When the reason for the kisses and the touches was removed the emotions ceased—somewhat as the rash disappears when the measles are cured.

CASE 18. A young man of twenty, of unusually high intelligence and good physique, came to the writer because of a twitching of one side of his face whenever he was in the presence of girls. The twitching caused him considerable mental distress and threatened to exclude him from even the most casual associations with the opposite sex. It had been going on for nearly four years.

The patient clearly recalled the beginning of the tic. When he was sixteen he was one day talking to a girl acquaintance. During the conversation she noticed a school pin which he was wearing and in a playful manner snatched it from him. Naturally enough he entered into the spirit of the occasion and attempted to recover the pin. But just when he was on the point of succeeding, the girl dropped the pin into the bosom of her dress and mutely challenged him to get it. He started to retrieve it, suddenly became very much embarrassed and overcome with excitement and then noticed for the first time that his face was twitching on one side.

A study of this patient's history revealed that he had grown up under the dominance of his mother and a younger sister (*i.e.* the opposite sex) and had consequently early acquired a feeling of incompetency and of fear or anxiety in relation to the opposite sex. Under the guidance of the analysis he gradually acquired a different attitude toward members of the opposite sex, lost much of his uneasiness—which was at the root of the tic—and the tic disappeared.

The first of these two cases is too transparent to need discussing. A few remarks will be sufficient to make the second case clear. Since childhood this patient had felt uneasy and incompetent around members of the opposite sex. As he grew older his anxiety when around girls became more and more acute and distressing, since for different obvious reasons he desired that he might maintain poise when in such situations. Inasmuch as he was a very aggressive sort of individual, this desire led him into undertaking more than he was capable of carrying through. Under the stress of sexual excitement his anxiety and fear became so strong as to usurp a certain group of muscles, largely because, undoubtedly, these muscles were already being activated by his suppressed excitement. The

tic once having occurred, it immediately became the fact to which his feelings of incompetency and anxiety attached themselves, inasmuch as he strongly preferred to believe that he was kept from associating with girls because of his anxiety lest the tic should occur and be noticed by others rather than to believe that he was actually in fear or dread of girls.

In these two cases we again may observe that we are dealing with a conflict of urges, one of which has been repressed or shunted into other than its natural channel of expression. In the case of the little girl we may assume that her breathing and walking across the floor gave rise to a feeling of guilt which became partially repressed and therefore forgotten once she had discovered a fairly adequate means of expressing it. Thus her feeling of guilt or shame or uneasiness or reproach having become repressed, its manner of expression became automatic in the sense that it was no longer under the control of her conscious personality. Only if we assume that repression had occurred are we in a position to explain the persistency of and lack of control over her peculiar tics. We might call such phenomena habits, or speak of them as being habitual acts; but a habit, we believe, is nothing more than an acquired and persistent manner of expression of an urge or tendency.

In the case of the typical or normal habitual act, however, the nature of the urge back of it is more or less clearly recognized by the individual. For instance, most men have a habit of shaving. If you were to ask one of them why he shaves he would perhaps reply that he shaves because he looks like "the deuce" when he doesn't. But now a certain woman has a *habit* of walking around the room touching and examining things, regardless of whether she is in her own home or among strangers. She is unable to explain

why she does this; she simply cannot help it. An analysis of her case reveals that she has a repressed desire (urge) to commit a type of sexual act which would be abhorrent to her conscious morals. Both cases are of the nature of habits; both have urges back of them. But in the first case the urge expresses itself in a natural manner and is consciously recognized by the individual, whereas in the second case the natural expression of the urge has been blocked and it therefore manifests itself in an unnatural manner, constituting a mental symptom (a compulsion).

**Doubts and Scruples.** Doubts and scruples constitute a fifth class of psychasthenic reactions. "Perhaps the worst feature of this psychoneurosis," says Myerson, "is the classical 'folie de doute,' which is fundamentally a mental struggle over each decision, no matter how trivial, a prolonged debate over whether or not to cross the street, how to put on the shoes, whether the gas is to be shut off one way or another."<sup>12</sup> The first thing to be noted concerning the doubts and scruples of the psychasthenic person is that they, like his other symptoms, are of the nature of compulsions; to him it seems that they are forced upon him. Observe the following case which is quoted from Frink.<sup>13</sup>

CASE 19. A boy in high school was supplied with some second-hand books. He began to doubt the accuracy of them, for, as they were not new, he thought they might be out of date, and what he read might not be the truth. Before long he would not read a book unless he could satisfy himself that it was new and the writer of it an authority. Even then he was assailed with doubts. For he felt uncertain as to whether he understood what he read. If for example he came across a word of which he was not sure of the exact meaning, he could not go on until he had looked up the word in a dictionary. But as likely as not in the definition of the word there would be

<sup>12</sup> Myerson, A., *The Psychology of Mental Disorders*, p. 62. Macmillan.

<sup>13</sup> *Op. cit.*, pp. 164-165.

some other word with which he was not entirely familiar and he would have to look *that* up, so that at times half an hour or more would be taken up in reading a single page, and even then he would feel doubtful as to whether he had gotten the exact truth. (Compulsive doubt.)

This boy did not doubt because he consciously wished to but because he was powerless to help his doubting.

The second feature of the psychasthenic doubt is that the affect is out of proportion to the significance and seriousness of the situation or fact to which it has become attached. Again, we have noticed this to be the case in regard to other psychasthenic symptoms. In the case of the phobia, for instance, the intensity of the fear is out of all proportion to the fact which arouses it. We could go ahead and point out that everything that we have said about the phobia, the obsession, the compulsion, and the motor agitation is in general true of the doubt or scruple. Consequently we should expect to explain doubts and scruples in the same general manner that we have explained the psychasthenic's other symptoms. Namely, some urge, a natural manifestation of which would be, or is, objectionable to the individual, has been aroused. Because of its objectionable nature the urge is kept from a natural form of manifestation and consequently appears in some other light.

This fact keeps the individual from recognizing his symptom as a manifestation of some objectionable urge. Or, again, an urge manifests itself in an essentially normal manner, and this manifestation (act) arouses in the individual doubts, scruples, anxiety, etc. Now for some reason he attempts to repress not the urge or its manifestation but rather the feelings which result. His attempt might succeed to the extent of dissociating the manifestation of the urge from the feelings which follow. The feelings now

become attached to some irrelevant aspect of his environment. An example of this type of phenomena is often to be found in the young boy who has taken up the practice of masturbation. This practice occasions feelings of guilt and anxiety, doubts, scruples, etc. The boy is reluctant to give up the practice not only because of the pleasure it gives him but also because he learns that others do it and are perhaps inclined, moreover, to laugh at his scruples and fears. He now sets out to justify the act; he rationalizes himself into believing that everything is all right; he endeavors to repress his feelings of anxiety, his doubts, scruples, etc. For a time it may appear that he has succeeded, but later he begins to experience anxiety, doubts, scruples again. But this time they are attached not to the act of masturbating but to some irrelevant fact. The principle involved, however, remains the same. We pointed out in an earlier chapter that emotion and feeling are in part impulsive; *i.e.* of the nature of urges or tendencies. Thus, in this case, the feelings of doubt and anxiety are manifesting themselves in a natural manner when they force the individual to concern himself with the factor that arouses them. But this form of manifestation is blocked and they are forced to assume a different form, to become attached to some other fact in the individual's life. We see, then, that the individual may not be conscious of the factor which is back of his doubts and scruples, or he may be conscious of this factor but not as the cause of his symptoms. When an emotion becomes attached to an irrelevant fact, the phenomenon is technically known as "displacement."

**Feelings of Unreality, Depersonalization, and Inadequacy.** It needs the sixth and last group of psychasthenic symptoms really to complete the picture. Feelings of unreality, depersonalization, and inadequacy always present rather conclusive evidence of a psychasthenic condi-

tion. Such a patient will usually describe his feelings somewhat as follows:

There is a feeling of unreality about things; although I recognize my customary surroundings, nevertheless there is a feeling of strangeness associated with them, they just don't appear natural. Often when I wake up or when I come in from the street my room appears strange; I see my chair and bed, know they are mine, and yet it seems that I am seeing them for the first time. Also there frequently seems to be two of me instead of one; I seem to be standing off looking at myself, watching and conjecturing about everything I do. At times I actually become embarrassed, so strongly do I feel that I am in the presence of a stranger who, however, is somehow a part of me. Finally, I am frequently distressed by a peculiar feeling that something about me is missing, that I have lost a part of myself, that I am incomplete.

According to Janet,<sup>14</sup> psychasthenia results from the lowering of the psychological tension. He assumes that a certain amount of energy is necessary for the maintenance of the mental synthesis or integration which, according to him, constitutes the personality. If the energy is inadequate, a state of partial dissociation or disintegration results; hence the feeling of strangeness and unreality which arises as a result of inadequate perception and comprehension. The feelings of depersonalization and inadequacy also result directly from the lack of proper integration of the different mental systems comprising the personality. This concept which Janet offers of psychasthenia is at the present time quite widely accepted. It will be noticed, however, that it does not explain this partial dissociation. Freud has gone a step further and offered an explanation of the psychasthenic condition.<sup>15</sup> He be-

<sup>14</sup> Janet, P., *Les Obsessions et la Psychasthénie*, Vol. I, Part 2. Alcan.

<sup>15</sup> See especially Hitschmann, *Freud's Theories of the Neuroses*, pp. 164-188. Moffat, Yard.

lieves that the state of partial dissociation is the result of the repression of sexual wishes or urges.

**Concluding Remarks.** In approaching psychasthenia from the standpoint of describing and attempting to explain its typical symptoms, *i.e.* the different types of psychasthenic reactions, we have had occasion to make free use of the concept of repression. For in every case we have found evidence that some urge has been repressed. Moreover we have found it necessary to introduce the concept of dissociation in order to make intelligible some of the reactions which we have discussed. Incidentally the reader will have observed that we encountered a type of dissociation differing in certain respects from any we had previously discussed. Namely, instead of an entire disposition (innate disposition or sentiment) being dissociated, it has usually been a matter of dissociation within the disposition itself. Thus in the case of the obsession the affective and conative aspects of the disposition have become dissociated from the cognitive aspects.

We are now ready to reconstruct the psychasthenic picture. We observed that the symptoms are predominantly of a mental nature, whereas in the case of neurasthenia the symptoms were predominantly physical. Secondly, we have observed that the various symptoms of the psychasthenic are fundamentally similar in that they are compulsive; to the patient it seems that he is compelled to react in a certain way or to concern himself with a certain fact. The neurasthenic may be unable to help his fatigue and be perfectly aware of this fact, but nevertheless it does not seem to him that he must be tired, that he is forced to be tired. The psychasthenic not only is unable to help concerning himself with the number thirteen (Case 11) but it seems to him that he is forced to attend to it. Perhaps we may make this difference clear if we take two

experiences common to most normal individuals. (a) An individual is tired. He is unable to account for his feeling of fatigue but nevertheless it seems to belong to him; there is nothing foreign about it. (b) An individual finds that a certain familiar melody tends to repeat itself over and over in his mind; he is unable to get his attention off it; it is as if it had thrust itself upon him. The former would be of the nature of a neurasthenic symptom or reaction, the second of the nature of a psychasthenic symptom or reaction. In neurasthenia it appears that we are dealing with a continuous state of conflict and a considerable degree of repression. In psychasthenia it appears that we are dealing with conflict, a greater degree of repression and to an extent with dissociation. Both are the result of failure to adjust properly to life-situations; both are nonadjustive personality types. However, it is to be remembered that they are seldom found as distinct pictures entirely separate from each other. Usually the individual who is definitely neurasthenic is also to some extent psychasthenic and vice versa; the mixed type is the rule, the pure type the exception.

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## CHAPTER X

### THE PSYCHONEUROSES (*Cont.*)

#### [HYSTERIA AND MULTIPLE PERSONALITY]

**The General Nature of Hysteria.** The word "hysteria" comes from the Greek term *hysteron*, meaning uterus. A few hundred years ago it was more or less generally believed that hysteria was caused by the uterus wandering about through the body. In keeping with this early view, hysteria was supposed to be a disease of women only. But at the present time it is quite definitely known that it is in no specific manner causally related to the uterus and moreover all the evidence goes to show that the disorder is quite as common among men as among women. Nevertheless, despite its misleading connotation, the term has become thoroughly entrenched in psychological and medical parlance, and consequently little or nothing would be gained here by substituting a more appropriate expression.

It may be well to give the reader a certain degree of orientation with respect to the general nature of hysteria before taking up its specific manifestations (symptoms). This may be done briefly by saying that hysteria is a mental disorder which is characterized by mental dissociation. A hysterical condition is a dissociated condition of the personality; and hysterical symptoms or reactions are in part simply manifestations of this state of dissociation. The reader must be careful to bear in mind that we regard the individual as being an integration of mental systems

and his personality as the expression of this integration. To the extent that the various mental systems are properly integrated, to the same extent will the individual's reactions be properly synchronized with the situation of the moment, other things being equal. We have already seen that dissociation may involve a complete mental disposition or that it may occur within a disposition. A study of hysteria will teach us that dissociation may involve almost any mental or physical function of the individual. The reader should also keep in mind that we are concerned in this book only with the functional disorders and that, therefore, we shall seek only for psychological interpretations and explanations of the phenomena which we discuss.

**The Symptoms of Hysteria.** The symptoms (nonadjustive reactions) of hysteria are frequently classified as physical and mental. There is little if any basis for such a classification and moreover it is likely to be misleading to the reader who is not very familiar with the field of mental disorders. Whether a given hysteric symptom involves the memory (mental) or the muscles of the arm (physical) is of secondary significance to an adequate understanding of its true nature and cause. A classification, based largely upon the writings and views of Janet, has been made, dividing hysteric symptoms into two classes: *stigmata*, which are more or less persistent; and *accidents*, which are intermittent and transitory. This general classification will be adequate for our purposes, the specific symptoms being designated by descriptive terms. Among the stigmata of hysteria are the following: (a) anesthetics, (b) paralyses, (c) tics and choreas, (d) amnesia, (e) increased suggestibility, (f) ego-centricity and emotional instability, and (g) alternation of personality. Among the accidents (hysterical attacks) are: (a) depression and exaltation, (b) nausea, (c) vertigo, (d)

anorexia (loss of appetite), (e) catalepsy, (f) stuporous and trance states, (g) extreme absent-mindedness, (h) somnambulisms, and (i) fugues.

The *anesthesias* constitute an important group of hysterical symptoms. Although these may involve, apparently, any sense, the visual and tactual senses are the ones most frequently concerned. Hysterical *anesthesias* are characterized by the following peculiarities:<sup>1</sup> (1) the anesthetic area does not conform to the anatomical distribution of nerves; (2) the anesthetic areas are movable; (3) the patient is often ignorant of his *anesthesias*; (4) the reflexes associated with the anesthetic area remain relatively intact. Thus, if the patient has an anesthetic hand, the insensitive area will likely be found to end abruptly at the wrist-joint, constituting what has been called "glove anesthesia." Or perhaps it will be an arm or both arms or the legs or one side of the body or the front or back of the body that is anesthetic. In such cases the anesthetic area appears to conform to what a naïve patient might consider to be a distinct part of his body. Sometimes, however, the anesthetic area is irregular, has no definite form or "meaning" and is without significant localization. A patient may have only one or several different anesthetic areas and only one or several senses may be involved.

In the case of hysterical anesthesia of the visual sense, a number of different phenomena have been observed. The visual field may be restricted to a radius of twenty, ten, or even five degrees. In other words, such a patient is able to see only those objects which are directly in the focus of vision; any object which is slightly to the right or left or above or below his line of vision is not seen. Again, only one eye may be involved, in which case the

<sup>1</sup> Bridges, J. W., *Outline of Abnormal Psychology*, p. 203. Adams.

individual may be able to see perfectly well with one eye but unable to see anything at all with the other. Occasionally cases have been observed in which the loss of vision involved one vertical half of the visual field (hysterical hemi-anopsia); that is, blindness for the left half or the right half of the visual field of each eye, or of the right half of one eye and the left half of the other, and vice versa. Complete hysterical blindness, although quite rare, has been observed. Note the following case, quoted after Janet.<sup>2</sup>

CASE 20. A man, thirty-eight years old, was busy cleaning a machine. A rag full of grease and petroleum caught in a gear and lashed him on the face. The face was only dirtied, and he did not trouble about the accident. He washed himself, but he had much difficulty in cleaning his skin and eyelids of these fatty substances. Remark that nothing penetrated into his eyes and that he felt no pain in them. However, after an hour, he seemed to see as it were a mist before him; this mist grew thicker and two hours later he could no longer see at all. His vision fluctuated a little on the morrow and the following days. From time to time he could see a little, chiefly with his right eye. These fluctuations lasted for a month, then they disappeared absolutely and for four years he remained quite blind.

Many other types of dissociation may occur within the complex function of vision. The individual may be blind to certain colors or to certain objects; there may be a restriction of the visual field of one eye to five or ten degrees and of the other eye not at all or only to twenty or thirty degrees; the visual field may be fairly symmetrical in contour or decidedly asymmetrical.

Thus far we have spoken as if hysterical anesthesia were in every sense true anesthesia. In a certain sense the anesthesia is real, in a certain other sense it is not real. In other words the hysteric with an anesthetic hand both

<sup>2</sup> Janet, P., *The Major Symptoms of Hysteria*, p. 186. Macmillan.

perceives and does not perceive tactual stimulations of his hand; he does not perceive them in a normally conscious manner, he does perceive them in a subconscious manner. In order to make clear the facts which we have in mind we can do no better than to quote again from Janet.<sup>3</sup> “. . . Hystericals, who have an exceedingly small visual field, run without in the least troubling themselves about it. This is a curious fact to which I remember having attracted the attention of Charcot, who had not remarked it, and was very much surprised at it. I showed him two of our young patients playing very cleverly at ball in the courtyard of La Salpêtrière. Then, having brought them before him, I remarked to him that their visual field was reduced to a point, and I asked him whether he would be capable of playing at ball, if he had before each eye a card merely pierced with a small hole. It is one of the finest examples that can be shown of the persistence of subconscious sensations in hysteria.

“ Besides, I had shortly afterwards the opportunity of making a still more precise experiment on the same point. A young boy had violent crises of terror caused by a fire, and it was enough to show him a small flame for the fit to begin again. Now his visual field was reduced to 5° and he seemed to see absolutely nothing outside of it. I showed that I could provoke his fit by merely making him fix his eyes on the central point of the perimeter and then approaching a lighted match to the eightieth degree.”

Other investigators, using various methods, have thoroughly substantiated these early experiments of Janet. It has been found, for instance, that if the patient who has hysterical blindness of one eye looks through a stereoscope, he will usually see all that a normal person would see, but if his good eye is covered up he will then re-

<sup>3</sup> *Ibid.*, p. 198.

port that he can see nothing. We can then say that he is able to see with the one eye only when he is using the other eye. In terms of our concept of dissociation we can describe this fact by saying that in some way the functioning of the "blind" eye has become dissociated from the mental integration which manifests itself in conscious reactions. Again, in the case of the naïve hysteric who has tactual anesthesia for some part of the body, the following experiment may sometimes be made successfully. The patient is blindfolded and then told to say "yes" every time he feels his skin touched and to say "no" when he does not feel his skin touched. Sensitive areas are then prodded and each time the patient says "yes"; then the anesthetic area is prodded and each time the patient says "no."

The reader may wonder if it is justifiable to speak of these phenomena as being in any sense true anesthetics. Is the patient in any true sense not-conscious of the stimuli which he reports he does not perceive, or is he only vaguely aware of them? Does he tend to neglect or overlook them? Can the patient be made conscious in a direct manner of the tactual stimulations of his anesthetic hand by having his attention drawn to his hand at the time? All the evidence appears to warrant the following answer to such questions. The patient simply does not possess the ability or capacity to perceive, in the conscious manner of the normal individual, the stimulations of his anesthetic organs, regardless of the intensity of the stimulus or the direction of his attention; but he does perceive these stimulations, and his perception is truly conscious in a certain sense, as the facts which we have recounted clearly show. Hence, with Janet and others, we may speak of subconscious perception and of subconscious reactions, implying when we do so that the

perception or reaction belongs to a secondary mental system which, at least in certain respects, is dissociated from the main mental integration of the individual, the personality. Consequently, when we hereafter use the term "conscious" we shall mean it in the everyday sense of the word, and when we use the term "subconscious" we shall mean to imply that the act is conscious not in the usual or normal or everyday sense of being conscious but in a secondary manner.

In leaving the matter of anesthetics the reader should bear in mind that we have merely spoken of a few examples belonging to only two of the eighteen or twenty modal senses. It is an established fact that hysterical anesthesia may involve any one of most if not all of the different sensory modes. The hysteric who is anesthetic to pain in some part of his body does not consciously experience the slightest pain when that part of his body is injured.

A second common group of hysterical stigmata are the *functional paralyses*. Frequent examples of hysterical paralyses are those involving a single muscle-group or member of the body (monoplegia), one side of the body (hemiplegia), the lower limbs (paraplegia), and the whole body (diplegia). Hysterical paralysis may be distinguished from organic paralysis by certain more or less definite signs. The deep reflexes are usually not affected and reactions to electrical stimulation remain normal in the case of hysteria.<sup>4</sup> Moreover, if the patient is asked to move the paralyzed member in a given direction, a movement in this direction may be initiated, but it is soon stopped by the contraction of the opposing set of muscles, and a slight movement in the opposite direction may occur. Or, following the command to make a certain movement,

<sup>4</sup> Ross, T. A., *The Common Neuroses*, p. 197. Arnold.

both sets of muscles may contract simultaneously and with such relative force as to result in no discernible movement at all.

There is an interesting form of hysterical paralysis, known as *astasia-abasia*, in which the patient appears to have complete control of his legs while sitting or lying down, but is unable to walk or stand. Thus one of the writer's patients, a young girl of seventeen, was able to execute any movement of her legs that the writer desired as long as she was in a reclining position. When on her feet she would sway from side to side, forward and backward, and sooner or later fall unless given support. She was unable to walk across the room by herself.

The paralyzed limb may be blue and cold and have a clammy "feel." Atrophic changes sometimes occur, and even the finger-nails have been known to waste away. These atrophic changes have often been attributed to disuse of the limb affected but the changes are frequently too great to be accounted for in this manner, and besides it has been demonstrated that the condition is amenable to psychological treatment in the same way that other hysterical symptoms are. During the war it was noticed that atrophic changes occasionally occurred very rapidly in the case of wounded limbs, and in an effort to account for this the theory was advanced that both the paralysis and the atrophic changes were due to a more or less continuous action of nerve influence between the focus of the wound and the spinal center. This phenomenon was given the name of "Reflex Paralysis." The theory has been largely discredited, however, by the fact that the disorder proved to be susceptible to psychological treatment.

Hysterical paralysis is often found to have followed upon some emotional shock. The young girl just men-

tioned lost the use of her legs following an unhappy love affair. McDougall<sup>5</sup> gives the following interesting case of paralysis and anesthesia in a soldier.

CASE 21. A youth of flabby moral texture was sent home from the Mediterranean with lower limbs paralysed and anæsthetic; a diagnosis of post-diphtheritic paralysis had been made. However, the signs were all in favor of a functional paralysis; and it appeared that, though he had suffered from a sore throat, the paralysis had set in just about the time that the transport on which he was going to the Gallipoli front had come within sound of the guns on that tragic grave of so many brave men. I tried hypnotic suggestion; but though he passed into hypnosis, I could not fully control him; when he was forced to move his legs, he fell into weeping and moaning. I therefore decided to proceed more slowly by waking suggestion. Following an explanation that the anæsthesia would recede day by day and that, when it was gone, he would have full use of his legs, I ostentatiously mapped the upper limit of the anæsthesia on both limbs each morning, and in this way drew off the anæsthesia like a pair of stockings, drawing it two or three inches lower each day.

*Tics* and *choreas* are common among hysterical patients. The hysteric tic presents certain differences from the psychasthenic tic, studied in the last chapter. Both are involuntary movements of some muscle or muscle-group and both may be more or less rythmical, but here the basic similarities seem to end. The hysteric's tic is more or less inhibited by the patient's attention and effort to control it; the psychasthenic's is more likely to become exaggerated if his attention is called to it. Distraction favors the hysteric's tic, whereas in a state of distraction the psychasthenic's may disappear completely. In the former case the patient may be unaware of his tic, while in the latter the patient finds it extremely difficult to keep his attention from it. The hysteric's tic is often associated with

<sup>5</sup> McDougall, Wm., *Outline of Abnormal Psychology*, p. 245. Scribner.

anesthesia of the part of the body involved, whereas this is perhaps never the case in the psychasthenic. In short, the hysteric tic, like the other hysteric symptoms, has all the signs of dissociation, while the psychasthenic tic, like the other psychasthenic symptoms, appears to be a sign or manifestation, primarily, of repression.

The *hysteric tic* may involve apparently any muscle of the body, even those belonging to the visceral organs.<sup>6</sup> Thus we find tics not only of the muscles of the face, eyes, mouth, hands, arms, neck, etc., but also of the respiratory and digestive musculature. Depending upon the particular muscles involved, the tic may manifest itself in continual grunting, or hiccoughing, or swallowing, or in facial contortions, such as wrinkling the forehead, pursing the lips, squinting the eyes, or in jerking movements of the head or in rotatory movements of the head or in movements of the hands or fingers, etc. Sometimes the tic occurs with an almost unbelievable rapidity, as shown in a case cited by Ross<sup>7</sup> in which the head was rotated at about 250 revolutions a minute. Strangely enough this did not occasion the patient any discomfort or even cause dizziness.

There is good reason for believing that every tic—as in fact every mental symptom—is meaningful, that it is in some way related to, or a partial expression of, some wish or desire (urge) or some affect belonging to the individual's past or present. Thus one patient had a tic which consisted of a turning of her head to the left. A study of her case revealed that previous to the tic she had led a very dull life, sitting by a window working. Her strongest desire was to leave her monotonous work and go out into the

<sup>6</sup> Since the tic seems to be distinguishable from the chorea primarily upon the basis of the size and complexity of the muscular system involved in the movement, we may drop all distinctions between the two and speak only of tics.

<sup>7</sup> *Op. cit.*, p. 200.

street, at which she constantly looked, turning her head in order to do so. The act gradually became automatic.<sup>8</sup>

A second case, cited by the same writer, brings out even more clearly the meaningful nature of the tic. It is the case of a girl of seventeen whose tic (chorea) consisted of turning her right wrist and raising and lowering her right foot. She had one evening overheard her parents bewailing their poverty. This worried her considerably and from that time on she would tumble and toss about in her bed and repeat aloud: "I must work, I must work." Now her work consisted of operating a lathe by treading a pedal with her right foot and turning a fly-wheel with her right hand. Upon waking in the morning she did not recall her movements and talk during the night, but the movement of the hand and foot continued. As we have already implied, the hysteric symptom may be considered as a manifestation of subconscious mental processes, and in keeping with this assumption we may suppose that the movements during her waking state were accompanied by the thought and feeling that she must work.

*Extreme suggestibility* has long been recognized as a peculiarity of the hysteric. Suggestibility will be considered in some detail in a later chapter and therefore we shall not go into the nature of it here. We may simply point out that the hysteric is prone to accept and carry out commands and suggestions from others without first subjecting them to a critical analysis. In this respect he is somewhat like the child who acts too readily upon the suggestions of the playful visitor. If a hysteric with a paralyzed arm is placed among a group of other hysterics they may all develop paralyzed arms in a few days. One patient known to the writer developed a drooping eyelid. Her mother had always had a drooping lid. Interestingly enough, this pa-

<sup>8</sup> Janet, P., *Major Symptoms of Hysteria*, pp. 126-127. Macmillan.

tient's right eye was affected while it was her mother's left one; but, of course, the right eye of one individual is on the same side as the left eye of a second individual when the two are facing each other. Consequently, the patient had developed an affliction of what she naively (perhaps subconsciously) considered to be the corresponding eye.

The *ego-centricity* which usually characterizes the hysteric patient is one of his most interesting and at the same time most indefinable features. It seems quite obvious that he may tend to use his symptoms as a means of gaining attention and yet he has a very peculiar impersonal attitude toward his symptoms. They do not distress him as the neurasthenic's symptoms do; in the past, many hysterics have asked that their paralyzed limbs be amputated simply to get them out of their way. In his general attitude the hysteric is very much like the child; he is open and frank in his bids for attention; the subtlety of the neurasthenic is largely lacking. His attitude is typically extroverted and consequently, since his symptoms are manifestations of dissociated mental systems, he must make an identification with them before he is able to make use of them in gaining attention and sympathy. He impresses us when talking about his symptoms very much as does the small child who is seeking to impress the visitor by displaying his new toys.

Since hysteria is viewed as a condition of mental dissociation, we should expect to encounter considerable *emotional instability*. We have learned that emotional stability can result only when there is an integration of the various mental systems, resulting in mutually modifying influences. In the absence of such integration the opposite condition, emotional instability, naturally results.

We shall speak of *alternating personality* near the end of the chapter.

*Hysterical attacks* constitute chiefly the group of hysterical accidents. The "Grand Attack" (Charcot) is quite rare and will not be discussed here. The more usual phenomenon belonging to this class of symptoms is the abortive attack which may assume any one of many different forms. Common among these are attacks of nausea, anorexia (loss of appetite), vertigo, globus hystericus (a complex of sensations as if there were a lump in the throat), ecstasy, depression, catalepsy (a peculiar waxy-like condition of the muscles), stuporous and trance states, extreme absent-mindedness, somnambulisms, and fugues. With the exception of the last two we shall mention these but briefly.

Janet tells of a case of a young woman who starved to death because of her dislike of turnips—she complained that everything smelled of turnips and thereupon refused to eat. The reader may recall the case of the little girl mentioned in a previous chapter who vomited every time school was mentioned. This reaction was clearly of a hysterical type. A certain young woman was considerably worried and depressed and had a tendency to cry. In order to please her family she endeavored to restrain her crying and to forget her worries. The result was that although she no longer experienced a tendency to cry and less tendency to worry, she was troubled by a peculiar lumpy feeling (more correctly, sensations) in her throat (globus hystericus).

States of ecstasy are frequently of a hysterical nature. The adolescent girl who laughs and cries simply because she is so happy, without knowing why she is happy, is a common instance. The ecstatic states of the religious fanatic and of the martyr undoubtedly belong here. Catalepsy may frequently be observed in hysterics, particularly during periods of abstraction. The patient's arm, if

raised to a horizontal position by a second individual, may remain in such position without any conscious effort or knowledge on the part of the patient. Perhaps those peculiar states experienced by some persons upon waking in which they are unable to move, to turn their heads or even their eyes, should be included under cataleptic attacks or crises. Periods of deep abstraction during which subconscious acts may be carried out are common. A certain high school teacher started one morning for his office. Some time later he woke up, so to speak, in his office sorting his mail. He was unable to recall anything he had done since leaving his home; it was as if he had been asleep. Upon checking up his movements between the time when he left home and the time when he arrived at school, it was learned that he had called for his mail, had spoken to several people whom he knew, and in every way had behaved in a perfectly normal manner. Subconscious activity (automatic acts) such as automatic writing, crystal gazing, etc., may be quite easily induced in most hysteric individuals as well as in many "normal" individuals. We might say here that all the evidence seems to warrant the statement that *mediumship, spiritistic phenomena, communication with spirits of the dead, etc.*, belong, broadly speaking, to the psychology of hysteria, except, of course, those practices which are deliberately misleading. *Somnambulisms* are peculiar hysteric crises which consist of a subconscious and usually very dramatic reënactment by the patient of some past emotional experience. We can do no better here than to quote the classical case of Irene, studied and reported by Janet.<sup>9</sup>

CASE 22. We come back to the common story of a young girl twenty years old, called Irene, whom despair, caused by her mother's death, has made ill. We must remember that this woman's death

<sup>9</sup> *Ibid.*, pp. 29-31.

has been very moving and dramatic. The poor woman, who had reached the last stage of consumption, lived alone with her daughter in a poor garret. Death came slowly, with suffocation, blood-vomiting, and all its frightful procession of symptoms. The girl struggled hopelessly against the impossible. She watched her mother during sixty nights, working at her sewing-machine to earn a few pennies necessary to sustain their lives. After the mother's death she tried to revive the corpse, to call the breath back again; then, as she put the limbs upright, the body fell to the floor, and it took infinite exertion to lift it again into the bed. You may picture to yourself all that frightful scene. Some time after the funeral, curious and impressive symptoms began. It was one of the most splendid cases of somnambulism I ever saw.

The crises last for hours, and they show a splendid dramatic performance, for no actress could rehearse those lugubrious scenes with such perfection. The young girl has the singular habit of acting again all the events that took place at her mother's death, without forgetting the least detail. Sometimes she only speaks, relating all that happened with great volubility, putting questions and answers in turn, or asking questions only, and seeming to listen for the answers; sometimes she only sees the sight, looking with frightened face and staring on the various scenes, and acting according to what she sees. At other times, she combines all hallucinations, words, and acts, and seems to play a very singular drama. When, in her drama, death has taken place, she carries on the same idea, and makes everything ready for her own suicide. She discusses it aloud, seems to speak with her mother, to receive advice from her; she fancies she will try to be run over by a locomotive. That detail is also a recollection of a real event of her life. She fancies she is on the way, and stretches herself out on the floor of the room, waiting for death, with mingled dread and impatience. She poses, and wears on her face expressions really worthy of admiration, which remain fixed during several minutes. The train arrives before her staring eyes, she utters a terrible shriek, and falls back motionless, as if she were dead. She soon gets up and begins acting over again one of the preceding scenes. In fact, one of the characteristics of these somnambulisms is that they repeat themselves indefinitely. Not only the different attacks are always exactly alike, repeating the same movements, expressions, and words, but in the course of the same attack, when it has lasted a certain time, the same scene may be

repeated again exactly in the same way five or ten times. At last, the agitation seems to wear out, the dream grows less clear, and, gradually or suddenly, according to the cases, the patient comes back to her normal consciousness, takes up her ordinary business, quite undisturbed by what has happened.

Irene had no memory of her periods of somnambulism nor did she have any memory of the period of her mother's illness and death. When she learned of her mother's death she was unable to grieve, although she thought it natural that she should. Moreover, during her somnambulisms she appeared entirely oblivious of her surroundings; all her energies became for the time being directed or concentrated toward one objective, namely, the re-enactment of the scenes relating to her mother's death. Obviously enough, the case of Irene presents a clear-cut instance of dissociation; certain strong sentiments toward a specific situation including her mother and herself, instead of becoming modified and properly integrated with her other experiences, became dissociated. This dissociated system was sufficiently strong to usurp, upon different occasions, the mechanisms of the entire individual, and consequently all the reactions of Irene at these times were manifestations of this dissociated system. Thus we see that whereas an anesthesia, a paralysis, a tic, a chorea, an abortive attack, is the expression of some desire, wish (urge), or affect in such a manner as is not entirely incompatible with the continuity of the functioning of the main mental integration, a somnambulism is the expression of a secondary integration which can come to light only at the expense of the main integration. Hence, during a somnambulism, the continuity of the individual's normal conscious life is disrupted.

The somnambulisms of Irene are examples of what Janet has termed the *monoideic* type, implying that all

the actions of the patient during the somnambulism relate to a single idea. There are other types of somnambulism which he has called *polyideic*. An example of this type is the case, which he cites, of a young woman who took a position at a tavern. The keeper of the tavern brutally mistreated her. She became ill and somnambulisms began. She would perhaps start by reënacting a rape scene, then suddenly catch up a broom and vigorously sweep the floor. At one time during a somnambulist state she wheeled a wheelbarrow around the yard. Another case re-lives various experiences associated with her faithless lover. But apparently all cases of polyideic somnambulism possess a high degree of unity; however diverse the actions may be, they are all expressions of a single secondary mental system, *i.e.* a dissociated sentiment or integration of sentiments. In one case the actions are all expressions of fear, in another of jealousy, in a third of grief, etc.

Quite similar to the somnambulism but differing from it in certain essentials is the *fugue*. In the fugue the individual leaves his immediate surroundings. Both in a psychological and in a physical sense he becomes a fugitive from the normal conscious life which he has been living. The following two examples will make the nature of the fugue clear. The first, cited by McDougall,<sup>10</sup> is an unusually transparent instance of this interesting phenomenon.

CASE 23. A colour-sergeant of long service was carrying a despatch from one part of the front to another, riding a motor-bicycle. He suddenly found himself, a few hours later, pushing his bicycle through the streets of a seaport town some hundred miles from the front. He was utterly bewildered and, in order to avoid suspicion of desertion, he surrendered himself to the military police. He remained unable to give any account of his long journey from a spot near the front to the seaport. After some stay in various hospitals he came under

<sup>10</sup> *Op. cit.*, p. 258.

my care. He had no symptoms beyond his amnesia for this short period of some hours' duration, and a certain depression and lack of self-confidence, such as naturally resulted from the circumstances in a man of his good record and responsible position. Waking conversation having failed to overcome the amnesia, I tried hypnosis and at once the amnesia yielded; the dissociative barrier was overcome, and he continued in the waking state to be able to recollect and describe the whole incident: how a shell exploded near him, throwing him down; how he remounted his cycle and set off for the seaport; how he found his way by studying the signposts and asking questions, etc. It was clear that, though his actions had been conscious, intelligent, and purposive, yet his conscious activity was of a restricted kind; he seemed to have had no thought about the consequences of his action, but to have been driven on by the single strong impulse of fear, taking the form of a desire to get far away from the danger-zone.

The second case is cited by Janet.<sup>11</sup>

CASE 24. The subject is a boy of seventeen, Rou., son of a neuro-pathic mother, rather nervous himself, who already had, when he was ten years old, tics and contractures in the neck. . . . At thirteen he often went to a small public house, visited by old sailors. They would urge him to drink, and, when he was somewhat flustered, they would fill his imagination with beautiful tales in which deserts, palm trees, lions, camels, and negroes were pictured in a most wonderful and alluring way. The young boy was very much struck by those pictures, particularly as he was half tipsy. However, when his drunkenness was over, the stories seemed to be quite forgotten; he never spoke of travels, and, on the contrary, led a very sedentary life, for he had chosen the placid occupation of a grocer's boy, and he only sought to rise in that honorable career.

Now there come on quite unforeseen accidents, almost always on the occasion of some fatigue or a fit of drunkenness. He then felt transformed, forgot to return home, and thought no more of his family. He would leave Paris, walking straight ahead, and go to a more or less great distance through the forest of St. Germain, or as far as the department of the Orne. Sometimes he walked alone; at other times he rambled with some tramps, begging along the roads; he had but one idea left in his head; namely, to get to the sea, enlist

<sup>11</sup> *Op. cit.*, pp. 51-53.

in a ship, and sail away toward those enchanting countries of Africa. His journeys ended rather badly; he would awake suddenly, drenched, half starving, either on the highroad or in an asylum, without ever being able to understand what had happened, without any memory of his journey, and with the most ardent wish to go back to his family and his grocery.

The duration of fugues varies from a few hours to several months or even years. One of Rou.'s fugues lasted for three months. Frequently the termination of the fugue is brought about, at least in part, by some reference to the individual's past life, or to his real name, or to some other fact of a definite personal significance. For instance, one of Rou.'s fugues came to an end very abruptly when a second person mentioned a certain date which happened to be the anniversary of Rou.'s mother's name-day and the feast of the Virgin Mary. Another individual came to himself suddenly when he noticed in a newspaper an account of his own disappearance.

Fugues appear to differ from somnambulisms in at least two respects. The activities of the individual during the fugue involve a greater part, so to speak, of the total mental integration (personality) than his activities during a somnambulism. In the second place, whereas the somnambulism is the re-living of some past experience in reality, the fugue appears to be a realization of, or an attempt to realize, some fancy, *i.e.* re-awakened desire or wish of the past. However, this last feature of the fugue has by no means always been obvious from the facts which have been gathered in each case. Rou. was undoubtedly endeavoring to realize a strong desire which had been aroused by certain experiences when he was a boy; and the soldier referred to (Case 23) was quite as obviously following out a desire to escape from the danger-zone. Although we cannot say with certainty that the sergeant's desire to escape from

danger was ever aroused before this particular time, it seems fairly safe to assume that it was. Indeed, it seems quite probable that he had often dreamed (day-dreamed) of the time when the war would be over and he could lead a more peaceful and less dangerous existence. But the known facts do not warrant a sweeping generalization to the effect that in every case the fugue is an attempt to realize a re-awakened desire of the person's past life, although what evidence we have seems to support such an assumption.

Perhaps here is as good a place as any to insert a few remarks about a peculiar hysterical condition known as *hysterical anorexy*,<sup>12</sup> which usually occurs in girls between the ages of sixteen and twenty-five.<sup>13</sup> The outstanding fact first to be observed in this peculiar disorder is that the patient refuses to eat. The disorder passes through three fairly distinct phases, and lasts not less than eighteen months and frequently for several years. The first phase, known as the *gastric period*, usually coincides with a slight affection of the stomach. Sometimes it follows upon strong emotional stress. During this phase the patient complains of vague sufferings which she associates with her digestion. She appears, however, to be in excellent health. During this period the patient is very docile, readily yielding to the prescriptions of her physician and to the entreaties of her family.

After some time the second phase, known as the *moral period*, begins. The patient now resists in every way she can the pleadings, arguments, and threats of her family and physician. She declares that she has no desire for food, that when she does she will eat, and that she can get along very well without eating. She is very active, takes long

<sup>12</sup> The condition is also called *anorexia nervosa*, *sitiophobia*, *sitieirgia*. and *hysterical inanition*.

<sup>13</sup> Janet, *Major Symptoms of Hysteria*, p. 229.

walks, and still appears to be in very good health. She may now eat nothing at all in the presence of others, or vomit immediately afterwards if she does eat. Since she continues week after week, all the time being very active, it is obvious that she eats in secret. But since she does not eat enough she loses in weight and gradually prepares the way for the third and last period, the *period of inanition*.

Now organic disturbances begin to appear. The breath is bad, the stomach and abdomen are contracted, the urine is extremely scanty, there is obstinate constipation, etc. The patient may now react in one of two ways: she either becomes frightened and gradually comes to accept food, which may lead to her recovery if not too late, or else she clings obstinately to her determination not to eat, serious organic complications arise, and death is the inevitable result.

Various explanations of this disorder have been offered. Some explain it as being due to a "fixed idea" in the patient's mind that she must not eat; others, that the patient has a fear (phobia) of food; others, that it is a result of a more or less deliberate determination on the part of the patient not to eat; others, that it is the result of gastric anesthesia and paralysis; others, that it is due to a widespread dissociative disturbance of the complex function of alimentation. As Janet suggests, perhaps a multiplicity of causal factors is always present. Following an unfortunate love affair a young girl may desire death, and starvation may appeal to her as being a desirable means of committing suicide. This may be the starting point for hysterical anorexy. The desire to die becomes expressed, in part, in the refusal to eat and thereby becomes itself unconscious (subconscious). Feelings of fatigue become repressed or dissociated and give rise to feelings of euphoria, which are not conducive to eating. Moreover, eating may

become to the patient a vulgar and dirty habit. Thus, one patient expressed wonder that people should gather "for this dirty operation." In short, it seems that the concepts of repression and transference and dissociation are adequate to explain this disorder. The refusal to eat is the expression of some strong urge which has been repressed or dissociated and consequently there occurs in keeping with this a change in the attitude toward eating and everything connected with food. We may tentatively assume that the surreptitious obtaining and eating of food by these patients is largely subconscious.

**Multiple Personality.** There seems to be no basic difference between this phenomenon and other hysterical disorders. As the term implies, there are cases in which the total mental integration has been dissociated in such a manner as to give rise to two personalities within the same individual. If the reader will accept this implication in a literal sense he will perhaps have less difficulty than is usually the case in grasping the facts of this relatively rare but thoroughly substantiated phenomenon. A single case of multiple personality, one that has been made famous by the study and writings of Dr. Morton Prince, will suffice to make clear to the reader the essential facts pertaining to the disorder. We might say here that multiple personality is to be considered in every sense as nothing more or less than a special form of hysteria. To give a detailed report of the following case would be impossible within the scope of this book; hence, we give Professor McDougall's <sup>14</sup> very clear and concise summary of it.

CASE 25. The Beauchamp case involved, in addition to the normal personality (here called B), which existed before and after the long period of disorder, three distinct personalities called by Prince B 1, B 3, and B 4. B 3 was known also as Sally, and that name will be

<sup>14</sup> *Op. cit.*, pp. 497-501.

used here. It will conduce to clearness of this condensed statement if I describe first the personalities B 1 and B 4 and outline their history, leaving Sally for later description; but the reader must bear in mind that Sally complicated the picture throughout the history.

B was a nervous impressionable child, given to day-dreaming. Her parents' marriage was unhappy, and her mother was harsh and indifferent to her; but B, nevertheless, was strongly attached to her mother, and when the latter died B, who was thirteen years of age, suffered much emotional disturbance. During the following three years she lived under the care of her father, and suffered many shocks of a minor kind. At sixteen she ran away from her unhappy home. Two years later (*i.e.* when eighteen) B had become a nurse in a hospital and had formed a strong idealistic attachment to a young man, G. One evening G appeared unexpectedly under dramatic circumstances, and approached her in such a way that her very sensitive nature received a severe emotional shock. One might fairly infer from the account given that G kissed her. B remained much agitated and, in the course of the next few days, manifested a marked change of character. "All her peculiarities became exaggerated. She became unstable and developed aboulia. She grew, too, abnormally religious." This shock initiated what may be called the second main period of the history.

This second period lasted six years, during which this new character continued to figure in her social circle as Miss B. In reality the new character was the personality B 1. She seems to have been formed by the exclusion, from the make-up of B, of certain character-elements which became the nucleus or foundation of the personality B 4. During these six years B 1 led an active life and became a college student; she was hampered by her poor health and the vagaries of Sally (to be described later). During these six years B 4 seems to have remained entirely latent. It was one year before the end of this period that the case came under the care of Prince.

A third period was initiated by another emotional shock related to that which had initiated the second period six years earlier. B 1 was much shaken; Dr. Prince was sent for and a sudden change took place in his presence. Much study was required to elucidate this change; the main facts only can be stated here. B 1 disappeared or became latent, giving place to B 4. This personality, B 4 which manifested herself at this moment for the first time, had no recollection of the events of the past six years, during which she had been

latent. She could recollect the events of Miss B's life up to the time of the shock which initiated the second period (shock 1); these events seemed to her to be her own remembered experiences; she took up conscious existence anew from this point of time (shock 2), as though the six years had not been. She thus had, in common with B 1, command of all memories up to the time of the first shock; but she was not identical with the B who suffered that shock. Just as B 1 differed from B in character, while retaining the memories of B, so also B 4 commanded the memories of B, but differed in character from B and also from B 1.

For nearly one year (the fourth period) B 1 and B 4 led the life of alternating personalities with reciprocal amnesia; and careful study of them during this time showed that they were complementary characters, each having command of the memories of the first period and of the memories of her own phases of dominance in the third period; while B 1 commanded also the memories of the second period. B 1 was a humble, weakly invalid, very suggestible, shy, retiring, studious, religious, always submissive, patient, amiable and altruistic, considerate of others and fond of children and old people. B 4 was very self-assertive, given to quick and violent anger, intolerant and quarrelsome, vain, sociable, irreligious, disliking children and old people. There were corresponding differences in tastes. Both were very emotional, but, whereas B 1 was wholly swayed by her emotions, B 4 fought them down. B 1 was easily tired and relatively inactive, though studious. B 4 was energetic and fond of bodily activity; she disliked most of the things that B 1 liked.

A fifth period was initiated by inducing deep hypnosis, when a personality appeared which commanded all the memories of both B 1 and B 4 and seemed to be, in respect of character also, a fusion of the two personalities B 1 and B 4. "She had lost the reserve, the depression, the emotionality, and the idealism of B 1; but she had lost also the quick temper, the lack of faith, the resentment, and the egoism of B 4. She was a person of even temperament, frank and open in address—one who seemed to be natural and simple in her modes of thought and manner. Yet she more closely resembled B 1, and might fairly be regarded as B 1 restored to a condition of healthy-mindedness." This personality, who seemed to be, and is regarded by Prince as being, essentially the normal personality B, restored to wholeness by synthesis of B 1 and B 4, her two halves, could not at first be maintained, owing in the main to the opposition

of Sally and B 4. There were frequent alternations of B with B 1 and B 4. During this period both B 1 and B 4 were amnesic for B's phases; but B commanded the memories of the B 1 and B 4 phases. There occurred some give and take of knowledge and memories between B 1 and B 4, and perhaps of character-constituents; what was lost by the one being gained by the other. It was not until after the lapse of some years that this fifth period was terminated by the enduring dominance of the healthy, normal B.

The case, so far as described above was, then, one of alternating complementary personalities, B 1 and B 4, with reciprocal amnesia. It remains to add to the picture the history of Sally.

Sally was an impish, childish personality and showed remarkable consistency, without any clear indications of increasing maturity throughout the several (some six) years of her active career. Her existence was discovered by Prince shortly after the case came under his care, *i.e.* early in the last year of the six-year second period. She manifested herself when B 1 was in hypnosis, speaking of B 1 as "she" and of herself as "I," and claiming to be a personality as entirely distinct from B 1 as was possible under the circumstances, the circumstances, namely, that they inhabited and made use of the same bodily organism. The subsequent course of events went far to substantiate this claim. The new personality at first was nameless; but soon she spontaneously adopted the name Sally Beauchamp.

It must not be assumed that Sally was merely the hypnotic state of B 1. Prince brings out very clearly the fact that the hypnotic state of B 1 (which was called B 2) was very different from Sally, was in fact, as is usually the case, manifestly the normal personality in hypnosis; whereas Sally was extremely different; and sudden changes in hypnosis from B 2 to Sally, and back again, produced startling contrasts. There was not only extreme difference of character between Sally, on the one hand, and B 1 and B 2 on the other; there was also difference of memory and knowledge. This difference cannot be described by saying that the memory of either personality was more extensive or inclusive than that of the other. Sally claimed that, between the times of her appearance in hypnosis, she led a subconscious or coconscious existence; and that, during these periods of submerged existence, she could, if she so wished (and frequently she did so wish) know and afterwards remember what went on in the mind of B 1; but that at times, as when, for example, B 1 read

books uninteresting to Sally, she (Sally) would pay no attention and would occupy herself with her own thoughts. Sally claimed not only to be entirely distinct from and independent of B 1, but also to dislike and despise her; and she manifested this attitude and supported her claims by forcing certain sensory and motor automatisms upon B 1, namely, visual hallucinations and impulsions to automatic speech and other actions, impulsions which B 1 found herself unable to resist, even when they led to actions that were very repugnant to her, such as telling lies.

Among these automatic actions was rubbing of the closed eyes, frequently repeated. This seemed to be an endeavour on Sally's part to get her eyes open. Hitherto, when Sally had been dominant, her eyes had always been closed. After many attempts the manœuvre succeeded at a moment when B 1 was drowsily resting, and Sally for the first time was able to see and to dominate practically the whole organism. From this time on Sally frequently alternated with B 1, not only in hypnosis as previously but at other times also; and, during the phases of dominance of B 1, Sally gave much evidence of continued existence as a coconscious personality. Sally could not always exclude B 1 and secure dominance at will; but she was able to achieve this when B 1 was tired or more "run down" than usual; and she monopolised the organism for considerable periods during which B 1 seemed entirely latent, and of which B 1 had no direct knowledge or memory. During this time Sally's activities largely took the form of teasing and hazing B 1, by writing to her impudent messages and playing upon her elaborate practical jokes; *e.g.* on one occasion Sally, while dominant, unravelled B 1's knitting and wound the thread all over the furniture of her room. Sally also during her subconscious phases would force inhibitions and automatisms upon the dominant B 1, much to the latter's annoyance. There was thus a struggle of two wills. "Such scenes as this were the outcome of a contest of wills, of Sally's will against Miss Beauchamp's will. . . . In these contests Sally usually won, and Miss Beauchamp's will (that of B 1) would be paralysed. The latter would not only find herself unable to will to do what she wished, but often was actually compelled to do something she did not wish to do."

Sally did not command all the accomplishments of the highly educated B 1; for example, she could not read French, a fact explained by her lack of interest in the more serious reading of B 1.

Prince summarises the relations between B 1 and Sally as follows:

"Sally is a distinct personality in the sense of having a character, trains of thought, memories, perceptions, acquisitions, and mental acquirements, different from those of B 1. Secondly, she is an alternating personality in that during the times when the primary self has vanished, Sally is for the time being the whole conscious personality, having taken the place of the other. . . . At such times B 1 does not become a subconsciousness to Sally but as a personality is wiped out (or rather, is latent). Thirdly, Sally does not simply alternate with B 1. There are times when Sally manifests herself as an extra-consciousness, concomitant with the primary personality B 1." The only incompleteness of Sally during her periods of dominance was a rare form of anæsthesia, namely, complete anæsthesia of the skin senses and of the "muscular sense" when her eyes were closed, and a general and continued anæsthesia of the deep tissues.

After the appearance of B 4, Sally continued her pranks, but the conflict became more serious; because B 4, as soon as she learned of Sally's existence and nature, made a sustained effort to get the better of Sally and to suppress her. Like B 1, the new personality B 4 knew nothing directly of Sally or of the events of Sally's phases of dominance. Sally had not the power of sharing or reading the thoughts of B 4, as she read those of B 1; but she could and did force upon B 4 some inhibitions and automatisms; though less successfully than in the case of B 1, because B 4 resisted and fought against such influences from the coconscious Sally.

At this time Sally wrote her autobiography, claiming to remember her own existence as a subconscious and coconscious personality from the time when the child B began to walk, and to have had even at that time tastes and points of view very different from B's.

Towards the end of the fifth period, Sally, who had fought for her life valiantly and successfully, began to show signs of discouragement, under the combined efforts to suppress her of B 4 and of Dr. Prince. She described herself as feeling "squeezed" during her subconscious phases. When the normal personality was restored as a stable synthesis of B 1 and B 4, Sally seemed to be deprived of her power, both her power of controlling the primary personality by inhibiting her actions or forcing upon her "automatic" actions and hallucinations, and also her power to secure dominance of the organism. Prince frequently refers to Sally as a group of conscious states or ideas split off from the main personality and synthesised to form a secondary personality; and in several passages he writes

of the restored personality in terms which imply that Sally was included in the synthesis. But, whatever Sally's nature and origin, it must be insisted that Prince's account does not justify the view that Sally was in any sense synthesized with or incorporated into the restored personality B. He has told us that he had found it "easy to amalgamate by suggestion the dissociated experiences of B 1 with those of B 4, so that they were remembered, but impossible to amalgamate Sally's with either." And he repeatedly states that the synthesis of B 1 with B 4 produced the normal whole personality B, while Sally became at such times "squeezed." Further, the restored personality did not command memories of the events of the phases of Sally's dominance. We are told "the real Miss Beauchamp is disintegrated into personalities B 1 and B 4, who, conversely, may be synthesised into real B." Further—"the resurrection of the real Miss B is through the death of Sally. . . . Of Sally, her life and her doings, she (the restored B) knows nothing, except indirectly. Of this part of her mental life she has no more memory than has B 1 or B 4." And of Sally we are told: "With the resurrection of the real self, she 'goes back to where she came from,' imprisoned, 'squeezed,' unable either to 'come' at will or to be brought at command. Automatic writing, speech, and such phenomena cease, and it has not been possible as yet to communicate with her, and determine what part if any she plays in Miss Beauchamp's subconsciousness, or whether as a subpersonality she exists at all. When, however, as a result of some mental catastrophe, she appeared again as an alternating personality, her language implied a persistent existence as a subconsciousness like that of her early youth, and as described in the autobiography."

This case illustrates both the *alternating* and *co-existing* types of multiple personality. It should not be difficult for the student to conceive of the phenomenon of an alternating personality: it is not at all inconceivable that environmental influences should effect two fairly separate mental integrations of the sum total of unit mental dispositions instead of a single integration. This same phenomenon is manifest to a lesser degree in many normal individuals. Take for instance the individual who devoutly upholds humility, honesty, generosity, etc., on Sunday, and does

so in all sincerity, and who on the six remaining days appears to have no scruples whatever against the ruthless exploitation of others. Such contradictory activity becomes clear only when we view it as the expression of two more or less distinct sets of sentiments.

And it should not be difficult for the reader, in the light of our previous discussion of dissociative phenomena, to grasp the essential facts pertaining to co-existing personalities. Obviously, it is impossible for two personalities to have complete control of the mechanisms of the individual at the same moment; and no such case has ever been reported, or, conceivably, ever will be reported. On the other hand it is comprehensible that one personality may have control of most of the mechanisms of the individual while a second personality controls the rest, resulting in subconscious (automatic) acts, hallucinations, etc. And it is conceivable that both personalities might be conscious of a given fact at the same moment just as two individuals might be. In brief, there appears to be nothing about the phenomenon of multiple personality which cannot be adequately described in terms of the concepts of integration and dissociation (disintegration).

We have now discussed most of the principal forms of hysterical symptoms or manifestations and we have identified hysteria itself with a state of dissociation of the mental integration or personality. We have not yet said much, however, by way of explaining this dissociation. In connection with this point we shall give four concepts of the nature and cause of hysteria.

### **Some Interpretations and Explanations of Hysteria.**

(1) Babinski puts forth the view that hysteria is a state of increased suggestibility, that its symptoms are produced by suggestion or auto-suggestion and can be removed by persuasion. We may tentatively define suggest-

ibility as an exaggerated readiness on the part of the individual to accept and carry out a suggestion, statement, or command of another person without first testing its value and validity by subjecting it to a mental trial and error procedure (critical thinking). Now it is quite well agreed that the hysteric is very suggestible; and there is much evidence that a symptom may be produced in a suggestible person by implying (suggesting) in one way or another that such a symptom will appear. But the essential fact to be explained is not the symptom but that of which the symptom is a manifestation. Of this fact Babinski seems to offer no adequate explanation.

(2) According to Janet, "Hysteria is a form of mental depression characterized by the retraction of the field of personal consciousness and a tendency to the dissociation and emancipation of the systems of ideas and functions that constitute personality."<sup>15</sup> He believes that hysteria depends in part upon an inborn weakness of mental synthesis and in part upon emotional stress and shock. The principal objection to this theory of Janet appears to be that it is an inadequate explanation of hysteria. There is strong evidence for believing that hysteria, as well as most if not all other mental disorders, has a genesis which usually extends back to childhood. To explain or account for a mental disorder in terms of heredity before every other possible means of explaining it has been exhausted is to encourage a fatalistic and possibly erroneous attitude toward the entire field of mental disorders. Moreover, heredity and environment are purely relative factors; conceivably a person of very poor hereditary equipment might make a fairly adequate adjustment to life-situations provided his early environment is exactly what it should be. Also there is good reason for believing that

<sup>15</sup> *Op. cit.*, p. 332.

the emotional shock which usually immediately precedes the development of hysterical symptoms is never anything more than a precipitating or exciting factor.

In a descriptive sense Janet's concept seems fairly adequate. That the hysteric's "field of personal consciousness" is narrowed is a fact which can be easily established, meaning by this that the hysteric is unable to unify and consequently to respond to a complex situation. For instance, the hysteric usually finds it impossible or extremely difficult to do two things at once, such as making a given repetitive movement with one hand and another type of movement with the other hand at the same time. Or, if he is in a room with several persons, he is likely to become wholly oblivious to the presence of everyone except the person to whom he is talking; he may even become oblivious of the person to whom he is speaking, having become entirely absorbed with his own thoughts. That the hysteric has a tendency to dissociation and that hysteria is a state of dissociation, we have already brought out. We should, however, have to object to such terms as "systems of ideas." It is not so much "ideas" that become dissociated as it is mental dispositions, including, always, urges and affects. An "idea," if the term is to be used at all, is an expression or manifestation, like an overt act, of an urge or affect.

(3) Morton Prince's concept of hysteria is quite similar to that of Janet. He considers it to be a form of dissociated or multiple personality. Prince undoubtedly makes more of the concept of mental conflict as a causal factor in the genesis of hysteria than Janet does.

(4) Freud's concept of hysteria is quite different from the previous ones. He contends that the dissociation is brought about by the conflict and repression of wishes and desires which are incompatible with the moral nature of

the individual. These wishes and desires are, according to him, always of a sexual nature. The sexual wish first comes into conflict with the individual's moral nature, *i.e.* the "Ego instincts" (which we should speak of as the sentiment of self-regard), and is then repressed. The wish, which is dynamic, being unable to find expression in a normal manner because of the repressing forces, becomes converted into physical innervations and inhibitions, which constitute the hysterical symptoms. Thus the symptom is a compromise formation between two opposing trends or urges. The repressed sexual trend or wish, being energetic in character, becomes fulfilled or expressed by its conversion into a physical symptom. A single repressed wish may give rise to several symptoms and, conversely, a single symptom may be a composite manifestation of several repressed wishes. Freud, too, places considerable emphasis upon the factor of heredity, contending that hysterical symptoms may develop only in the hereditarily predisposed character, the individual of a *psycho-sexual constitution*.

Freud has been severely criticised, chiefly because of the emphasis which he gives to sex in the etiology (cause) of mental disorders. Undoubtedly much of the criticism which has been levied against him on this point is justified. But we shall not concern ourselves at this point with a criticism of Freudian theories except to point out that there is little if any evidence to support the contention that sex, either in a narrow or broad sense, is the sole etiological factor in the genesis of hysteria.

Perhaps the most satisfactory concept of the nature and cause of hysteria would be a composite of various aspects of the views of Janet, Prince, and Freud. Such a concept might be somewhat as follows: Hysteria has its origin in mental conflicts between the sentiment of

self-regard and urges, *i.e.* wishes, desires, sentiments, which are incompatible with it. The incompatible sentiments become repressed. During the period of conflict and repression the objectionable urges become more or less orientated, so to speak, toward a given manner of expression. Then, upon the occurrence of a severe emotional shock, the conflict between the two sets of forces becomes so strong as to result in a dissociation. Frequently there is something in the situation at the time of the emotional shock which more strongly favors a certain type of manifestation of the dissociated urges. The manifestation of the dissociated urges (sentiments) constitutes the hysterical symptoms.

But now how are we to explain the fact that some individuals appear to be unusually prone to the development of hysterical symptoms while others develop neurasthenic, psychasthenic, or some other type of symptom? In other words, why do some personalities become dissociated while others do not? A complete answer to these questions is not forthcoming at the present time. Possibly there is a predisposition in some individuals to dissociation; but such a view should be taken only when the facts unmistakably warrant its acceptance, and at the present time they do not since other facts appear possibly adequate to account for dissociative phenomena. There is a fairly clear-cut type of personality which we might term for the moment the "hysterical personality." It is characterized by extreme ego-centricity and emotional infantilism. Perhaps its principal features can best be made clear by the citation of a specific case.

A young woman recently came to the writer for help and advice. Up to the present time she has developed no definite symptoms. She states that there are three men, all of whom are very much in love with her. She thinks,

since she is in love with none of them, that she should give them up, that is, encourage them to look elsewhere for female companionship. But this she has been unable to do because they mean too much to her. She further admits quite frankly, though with some embarrassment, that the height of her ambition would be to have all men, who are at all desirable, in love with her. As she puts it, she would like to be in some way a help to all men, to lend her own personal touch to their lives. She belongs to a fairly large group of individuals who make up the missionaries, the martyrs, and the lovers of mankind. This is her ego-centricity. She is definitely infantile in her emotional reactions. She behaves like a spoiled child. She is obstinate (negativistic), petulant, whimsical, and has never developed in the proper manner those sentiments which make a true give-and-take relationship with others possible. While believing herself to be the most generous person in the world, she is really utterly selfish.

It is the present writer's experience that this type of individual always belongs to the more extroverted class, and we pointed out in an earlier chapter that the extrovert is more prone to dissociation than the introvert, and we indicated the reason why this is so. Thus we may tentatively assume with McDougall and others that hysteria is typically a disorder of the more extroverted person, and that the strongly introverted person seldom develops dissociative symptoms. We have indicated already that introversion-extroversion may be largely if not wholly a result of childhood environmental influences. Hence there appears no good reason for assuming that hysteria is primarily a result or outcome of defective heredity. Let us rather say simply that hysteria is a result of mental conflicts within a personality which is not strongly enough integrated to withstand the strain imposed.

**The Intelligence of Psychoneurotics.** Hollingworth made a study of the intelligence of neurotics which promises, if fully substantiated by further studies, to shed additional light upon the nature of the selective factors determining the different neurotic disorders. The following quotation will serve to summarize his study.

After this tabulation had been completed, the individuals were classified under three headings, according to the nature of their specific complaints. In Class I were placed all cases in which the specific symptom was definitely *physical* in character, representing a bodily disability of an objective sort, which would be clearly observable by an onlooker and which would manifestly interfere with the patient's activity and work. In this class came such complaints as fits, tremor, stuttering, seizures, dizziness, tics, paralyses, contractures, sensory disturbances, anesthetics, blindness, deafness, aphonia, weakness, enuresis, cardiac trouble, hemiplegia, convulsions. In Class III were placed those individuals whose specific complaints were definitely of a *psychic* or subjective character, not externally obvious to the observer. In this class came such complaints as fears, worries, anxieties, obsessions, sexual ruminations, psychasthenia, hypochondria, bad dreams, nightmares, phobias, emotional disturbance, excitement, amnesias, aboulias, depressions. In Class II, an intermediate class, were placed individuals of two sorts. Cases showing specific symptoms both of Class I and of Class III were placed in Class II, as uncertain cases. Thus an individual with a functional paralysis, accompanied by anxiety states and fears, would belong in Class II, as a "composite" case. Further, in this class were placed individuals manifesting an array of complaints which to the writer were apparently "transition" symptoms—that is, symptoms neither clearly physical and objective nor clearly psychic or subjective. Thus "headache" may be considered on the one hand as a definite somatic disturbance of the objective sort, in so far as it may clearly incapacitate the patient and be fairly obvious to the observer in its consequences. On the other hand it is by

no means as objective or somatic as is a paralysis, a contracture, or a convulsion. Hence it is placed also in the intermediate class as a transition or doubtful criterion. In Class II, thus, were placed cases complaining of headache, pains, insomnia, somnambulisms, queer feelings, chills, restlessness, fatigue, fainting spells marked simply by a loss of consciousness with no convulsions, doubtful cases, and cases clearly combining the symptoms of Classes I and III.<sup>16</sup>

The reader will observe that these three symptomatological classes which Hollingworth distinguished in his study correspond in a rough way to the three general classes of psychoneuroses which we have thus far discussed. Class I in particular corresponds fairly closely to the hysteric type of psychoneuroses. There is also a rather high degree of correspondence between Class III and the psychasthenic type. An identification of Class II with the neurasthenic type of psychoneuroses is less certain, but even here there is considerable correspondence. The intelligence scores of these three groups, given in terms of median mental age, were: Class I, 10.9; Class II, 12.0; and Class III, 14.5. This would seem to imply that the less intelligent individual is more likely to develop dissociative (hysteric) symptoms, while the more intelligent person is more wont to develop symptoms of repression (psychasthenic symptoms), to mention only the two extreme groups with respect to intelligence rating. And this seems to accord very nicely with our concept of the personality and the nature of the mental disorders which we have discussed. And this in turn would mean that the more intelligent individual is more likely to have a strongly integrated personality than the person whose various mental dispositions are but loosely related or interdependent.

<sup>16</sup> Hollingworth, H. L., *Psychology of Functional Neuroses*, pp. 103-105. D. Appleton and Company, New York.

Can we show that intelligence plays a significant rôle in the integration of the individual, *i.e.* in the development of personality?

Without concerning ourselves at this point with definitions of intelligence or with a discussion of its nature, we may say that to the extent that an individual is intelligent, to the same extent will he be capable, other things being equal, of harmonizing the various aspects of his environment and consequently of adjusting himself properly to the complexities of the world in which he lives. To illustrate: A small child may easily be conditioned to react with fear to the presence of a dog. But it will also be noticed that the child will then react in the same manner to all objects which are more or less similar to dogs. This is not true in the case of the normal adult. The difference between the two apparently lies in the fact that the child does not perceive or recognize the differences between the dog and the other objects; he perceives only the more obvious features, which are more or less similar. Therefore he reacts to all the objects in the same manner. The adult distinguishes between dogs and other animals, by which he has never been frightened, or even between different dogs. His perception of these differences determine his responses and consequently he reacts with fear only to a specific object, or at most to a specific class of objects. The child's disposition of fear remains relatively unintegrated in the sense that it alone is aroused by a large class of objects which, if correctly perceived, would be potent for arousing other modifying dispositions or, at least, would possess no potency for arousing the disposition of fear. The ability to perceive correctly the various features of a complex object, the various aspects of a situation, is certainly a matter of intelligence. To the extent that a complex situation arouses a number of

different mental dispositions, to a like extent have the various aspects of the situation been perceived, and, it follows, to a similar extent will the individual's reaction to the situation be a manifestation of his mental make-up as a whole; which is what we mean by integrated reactions. Integration manifests itself in discriminating reactions to complex situations. Hence we see the significance of intelligence in the gradual process whereby the individual's many traits or aspects become integrated into a single pattern.

But it must be pointed out in reference to the study made by Hollingworth that the person with dissociative symptoms is perhaps the least capable of any of giving a good account of himself in an intelligence test. We have seen that he has extreme difficulty in sustaining his attention, that he is suggestible, that he is prone to spells of abstraction over which he has no control. Moreover, the dissociation might involve various functions and the ability to recall facts, both of which might be of prime importance to a satisfactory completion of the test. Consequently we could hardly say on the basis of such studies that the less intelligent individual is more prone to the development of dissociative disorders; it might be that such disorders incapacitate the individual more than disorders of certain other types. However, evidence from other sources appears to lend support to the view which we have been considering. For instance, it was noticed during the war that the common soldiers were more likely to develop dissociative symptoms than were the officers; and intelligence tests given both officers and soldiers have undeniably indicated a higher degree of intelligence in the former.

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## CHAPTER XI

### THE PSYCHONEUROSES (*Concluded*)

#### [THE SEXUAL NEUROSES]

**A Classification of the Sexual Neuroses.** We come now to a group of neuroses which are not distinct in any fundamental sense from those which we have discussed but which, nevertheless, are of sufficient social, educational, and psychological significance to merit separate consideration. These neuroses, which we shall call "the sexual neuroses," are extremely common and include a considerable number of abnormalities. Broadly speaking, it is possible with respect to the sexual disposition to distinguish three classes of neuroses. (*a*) There are those neuroses which, although they do not have a sexual etiology or motivation, do nevertheless involve in some way the sex function or disposition of the individual. In other words, the symptom itself has an apparent sexual significance, while that of which the symptom is an expression, the urge, is non-sexual. (*b*) There are those neuroses in which the etiological or motivating factor (the urge) is of a sexual nature, while the manifestation of the urge, that is, the symptom, is apparently non-sexual in nature. (*c*) Finally there are those neuroses in which both the urge and its manifestation are of an obviously sexual nature.

We shall have very little to say of the first two classes other than to cite a few illustrative examples; the principles involved are identical with those which we have discussed in the preceding chapters. A certain individual, a

man in his early thirties, complains of functional impotency. He appears to be well oriented with respect to sex, rationally viewing normal heterosexual relations as a legitimate and entirely natural function of the adult individual. He appears to have no other fixations, compulsions, obsessions, etc., with respect to sex. An analysis of his case reveals that during his early childhood he was caused to feel definitely inferior to members of the opposite sex as a result of various experiences, among which was that of being seduced by a woman while he was still a child. His inferiority complex is particularly susceptible to arousal by any circumstance which suggests truly intimate relations with a member of the opposite sex. In fact he recalls that after he had attained to manhood he was anxious even before he had ever attempted intercourse lest he should be impotent. Thus, it seems rather obvious that his impotency is a manifestation not of the sex drive but of fear and anxiety, of feelings of inferiority. It simply happens that his inferiority complex relates to situations which are of a sexual nature; the symptom has an apparent sexual significance, the urge back of the symptom is non-sexual. Another example belonging also to the first class: A young woman in her early twenties readily yields herself (nymphomania) to every man who makes advances to her; moreover, encourages sexual advances. Now this particular activity immediately demands an explanation once we learn that she derives little or no pleasure from the sex act and moreover that once she has had relations with a man, her interest immediately becomes directed toward someone else. Moreover, although above the average in intelligence, she is at a loss to understand her persistent desire for new experiences of this sort. A study of her past history reveals that when a girl (between the ages of eight and fifteen) she considered herself

very unattractive and attributed to this her scarcity of friends. Upon reaching adulthood she naturally learned that the mere fact of her physical constitution had a high potential value for attracting the attention of men. But having never developed a coquettish or winsome manner, which would have served as an index to her of the amount of attention she was capable of gaining, she is more or less forced to put things to the simple test of offering herself to a man. If he accepts her she is reassured that she is attractive, or at least that she is not entirely without appeal. There appears to be no good reason for assuming in this case that her activity is wholly motivated by the sex urge. Her activity is entirely comparable to that of the child who blows his whistle, or shouts, or screams, in order to get the attention of others. At the same time there is no adequate reason perhaps for completely dismissing the sex urge; it is entirely plausible that the girl's sex activity is doubly motivated, as perhaps is usually the case, but that in this particular instance the sex urge holds a subordinate position to that of the self-assertive urge. Hence, although the symptom itself is sexually colored, the principal urge back of it is non-sexual. These cases simply illustrate the fact—a fact similar to some which we have already observed—that a non-sexual urge which is thwarted in its natural manner of expression may possibly manifest itself in activity which is to all appearances motivated by the sex urge. It now becomes obvious that it is more or less an arbitrary matter whether or not we designate such neuroses as “sexual neuroses”; etiologically they are not sexual neuroses, symptomatologically they are.

The second class of sexual neuroses which we mentioned is, in a sense, the opposite of the one just given; that is, the etiological factor is of a sexual nature while the

symptoms are not obviously sexual. Stekel<sup>1</sup> gives considerable evidence to support his contention that many if not all kleptomaniacs are sexually motivated. The act of stealing is simply a substitute for some sexual act which the individual would like to carry out but which would be strongly opposed to his self-regarding sentiment. Due to conflict and repression, the sex urge manifests itself in another direction; namely, in the commission of some other act which also is in opposition, but in a less degree, to the individual's sentiment of self-regard. Hence the act of stealing is a compromise, like all symptoms resulting from repression, between two opposing trends or urges. Various writers report that some kleptomaniacs actually have an orgasm concurrently with the act of theft. We do not believe, however, that every kleptomania is sexually motivated. The reader will recall our discussion of the case, given in an earlier chapter, of the boy who had a mania for stealing glasses. Another example of this class of neuroses is that of a young woman who has a strong fear, amounting almost to an obsession, of pregnancy, and who at one time actually believed herself to be pregnant, despite the fact that she had never had sexual relations with a member of the opposite sex. Her fear is traceable to a strong desire for sexual relations, a strong sex urge, coupled with an underlying conviction that she would be unable to resist the advances of a man under any but the most favorable of circumstances. Thus the fear is an expression both of the sex urge and of certain aspects of the sentiment of self-regard. The middle-aged spinster's anxiety and fear of burglars causes even the layman to smile in a knowing fashion. In many cases the woman is undoubtedly both dreading and hoping that she will find, not a burglar, but a lover under her bed.

<sup>1</sup> Stekel, W., *Peculiarities of Behavior*, Vol. 1. Boni and Liveright.

The third class of sexual neuroses which, more than the other two, might be adequately designated as such includes a fairly large number of neuroses which are sexual both in their etiology and in their symptomatology or manifestations. The remainder of the chapter will be devoted chiefly to a consideration of these. But before taking them up it is necessary to decide as definitely as possible exactly what constitutes normal sexuality (that is, normal sexual activity) in the human individual, a question which is still largely clothed in ignorance, sentimentality, and traditional nonsense.

**Normal Sexuality.** Despite many exaggerations and quite possibly many false premises and erroneous conclusions of which it has been and can still be accused, the psychoanalytic (Freudian) school has done far more than any other agency either in modern or ancient times to clarify our knowledge of the sex life of the human individual. According to the tenets of this school, the sex life begins not with pubescence but at the time of birth or soon thereafter. Between the time of its birth and the time when the individual reaches maturity there evolve, both physically and mentally, many different stages of sexual development. For purposes of simplification these different stages may be reduced to three.

*First Stage:* To begin with, the human infant is auto-sexual. In other words, he is sexually self-sufficient; he is his own sex-object. Sexual activities during this period include masturbation, sucking, self-fondling, tickling, etc. The Freudians do not mean by this that sucking, for instance, is purely a sex activity in the child. Rather they point out such facts as the child's often being quieted, even when no longer hungry, by being permitted to retain the nipple in its mouth, or by being given a pacifier; and they point also the rather common practices of

thumb-sucking, sucking of hard candy or other objects, etc., in older children. They see in these acts the genesis of kissing in adults, which is obviously a sexual act. The various parts of the child's body which when stimulated result in supposedly sexual gratification have been called *erogenous zones*.

Many mothers and nurses know that masturbation, that is, self-manipulation of the sexual organs for the purpose of the pleasure derived, is quite common among children as early even as the age of two. Many of the lower animals may be observed to masturbate; the dog, sheep, bull, and stallion are common examples. Some of Freud's critics have declared that masturbatory practices in small children are not really sexual and that the pleasure derived is not of a sexual nature. But since it is well known that sexual pleasure is possible several years before sexual maturity (pubescence) is reached, it seems to the present writer more logical to assume that these early practices of the child result in true sexual pleasure, at least to a degree, than to assume that they give rise to some sort of non-sexual enjoyment. According to the Freudians, these practices are not only of a truly sexual nature but they are to be considered quite natural to the first years of childhood.

*Second Stage:* Following the autosexual stage the individual passes through a homosexual (or better, bisexual) period. During this period he is sexually attracted to members of either sex. This, according to the Freudians, accounts for the strong attachments which boys form for each other and similarly in the case of girls. Also it accounts for the frequent homosexual practices found among children, such as mutual fondling and masturbation, sexual congress between members of the same sex, etc. Such activities are natural to individuals who have

passed beyond the autosexual period and have not yet arrived at the period which normally characterizes the adult.

*Third Stage:* Normally, with the advent of puberty, the individual relinquishes his bi-sexual trends and activity for the normal heterosexual trends and activity of the adult. It is important, however, that the reader should know and remember that according to the Freudian view no individual ever gets entirely away from his earlier sexual trends. In other words we are all to an extent, even in adult life, inclined to auto- and homosexual activities. Heterosexuality is characterized by sexual attraction and activity with members of the opposite sex. But not all heterosexual activity is by any means to be considered normal; later we shall mention certain abnormal forms which it sometimes assumes.

Another aspect of the Freudian theory of sex is that the sex "instinct" is in reality a group of more or less distinct sexual tendencies or trends. These tendencies are arranged in pairs. Thus it is claimed that in every individual there is a tendency to exhibit the body, particularly the sexual parts, to other individuals, especially to members of the opposite sex; and that there is another tendency to inspect or examine the bodies, particularly the sexual organs, of other individuals, especially of members of the opposite sex. These tendencies, or rather the activity to which they lead, are called respectively *active exhibitionism* and *passive exhibitionism* (or inspectionism). Similarly there is in every individual a tendency to seek, and the ability to derive, sexual gratification by the infliction of pain on another individual; and complementary to this tendency is that of seeking, and possessing the ability to derive, sexual gratification from the infliction of pain on one's self by another individual. These

two tendencies or dispositions are termed respectively *sadism* and *masochism*. These different sex dispositions, which the psychoanalysts postulate, are usually spoken of as components of the "sex instinct."

Although we have merely indicated some of the more fundamental aspects of the Freudian concept of the sex disposition, what we have said will suffice for the present. Let us now examine the hypothesis in the light of certain facts and other concepts.

If we approach the matter of sex from a broad biological or genetic point of view, we shall discover in the phylogenetic development of the sex function certain stages which correspond more or less closely to those which Freud contends the human individual passes through in his extra-uterine ontogenetic development. The amoeba, for instance, is monosexual or autosexual. It is able to reproduce independently of another member of its species, by a simple process of division. If we go a few steps higher in the phylogenetic scale and take, for example, the hydra, we find an example of true bi-sexuality; a hydra may develop both male and female sex organs, both ova and spermatzoa. But at the same time there are two other possibilities in the hydra: It may produce a new individual by the simple process of "budding," which is essentially a matter of autosexuality, or it may develop the sex organs of only one sex, the sperm or ova from which may fuse with the sperm or ova from another hydra to form a new individual. This essentially constitutes heterosexuality. A still higher stage in the scale is represented by the earthworm. The earthworm is truly bi-sexual, possessing both male and female sex organs, equally developed and thereby making of the individual a male and a female at the same time. But the earthworm mates with another of its kind, each worm receiving

sperm from the other, and, since the two worms are sexually identical, this constitutes in a sense homosexuality. And higher still in the animal kingdom we find heterosexuality, which perhaps reaches its highest form in the mammals.

But now to what extent if any do these facts which we have just cited indicate that the human individual passes through an auto- and a homosexual stage before reaching the heterosexuality of the normal adult? First of all, we must remember that man is far removed in the way of specialization of structure and function from those forms in which we find these "lower" types of sex function. Hence if man does recapitulate these various forms of sex function, we should expect this to occur along with his anatomical sexual differentiation during the early months of intra-uterine life. At the time of birth the human individual is characterized in every fundamental respect by the sexual structures which are normal to the adult; the female infant not only has the ovaries present at birth but the ova themselves are present. This undeniably indicates that if the human individual recapitulates structurally the earlier stages of sex evolution he does so previous to the time of birth. What reason is there, then, for assuming that at the time of birth the individual has still to recapitulate mentally (psychically) the earlier stages of sex evolution? Apparently the only reason such an assumption has ever been made is because it offers a very simple and concise explanation of much of the sex activity of children and also of many of the sexual perversions and abnormalities of adults. But it is quite possible that these phenomena can be more adequately, though less simply, explained in other ways. We shall return to this point a little later.

With respect to the various so-called components of the

sex disposition ("instinct"), we may begin by mentioning some of the facts which this aspect of the Freudian theory is supposed to explain. In his observations of some of the infra-human primates, Hamilton noted behavior which seemed to be clearly of an exhibitionistic nature. He says, "I found that if I deprived a female monkey of her freedom and confined her in a cage from which she was visible to males she would croak invitingly to them and display her genitalia. Healthy, free males, when similarly confined would also resort to exhibitionism in an apparent effort to attract the females." <sup>2</sup> Exhibitionistic acts are also observed in children. It is a common trait in little girls to call the visitor's attention to their new dress and they will sometimes voluntarily exhibit themselves to little boys. Frequently boys who are in swimming without bathing suits will jump out on the bank and shout to the passing stranger, or to the people in a train passing over the bridge above. Much of esthetic dancing is clearly of an exhibitionistic character and it is a fact of everyday observation that womankind takes kindly to styles which permit of considerable display of the body. On the other hand inspectionistic acts (passive exhibitionism) are to be observed both in infra-human primates and in man. Male monkeys are prone to examine more or less minutely the sexual parts of the female. Children often examine each other's genital organs, and inspectionism is a common aspect of adult sexual activity.

Sadistic behavior is observable in some of the lower animals as well as in man. The stallion is often unnecessarily rude to the mare, biting and not infrequently kicking her. The result is, provided the mare is "in heat," that she becomes sexually stimulated and more readily yields to the advances of the stallion. The writer once

<sup>2</sup> Hamilton, G. V., *Objective Psychopathology*, p. 309. C. V. Mosby.

observed a mare copulate with an unusually aggressive stallion only a few days previous to giving birth to a colt. Hamilton observed that if a male and a female monkey were confined for some time in a single cage, the male would resort to sadistic behavior, biting and scratching the female until she "squeaked as if in pain," and that he would then copulate with her. Everyone has observed the tendency in boys to be rude and often brutal toward girls. The fact that such behavior is sometimes accompanied by an erection has its significance. The sex life of many adults has its tinge of sadism which, however, we may suppose is not as obvious as it would be were it not for the "softening" influences of the social environment to which the individual has been subjected. Nevertheless such endearing expressions as, "If I had you here I would hug you to death," "I should like to kiss you until you cried," are perhaps not uttered without a certain element of literal meaning. Some married couples fall into the unconventional and distressing, albeit satisfying, habit of getting themselves into a rage with one another just previous to their sexual unions. Thus, to give a quotation which Hamilton cites: "He fusses me, finds fault with me, flies into a rage with me, and seems to have no other motive for all this but a desire to make me suffer—and then expects me to be his obliging mistress a moment later." <sup>3</sup> And again on the other hand we find a type of behavior both in certain of the lower animals and in the human family which is more or less opposite to that which we have just mentioned. We pointed out that the stallion's rude tactics are not without result and, we can add, the male monkey's brutal treatment of the female apparently results in sexual stimulation of the latter as well as of the former. The

<sup>3</sup> *Ibid.*, p. 324.

barnyard cock will often chase the hen several times across the yard, but the moment he catches her by the neck with his beak she graciously submits—and often as soon as the sex act is over she flies into his face with unmistakable fury. And among human beings, “cave-man tactics” are only too frequently successful and not without a certain definite sexual significance. One woman complained that her husband did not love her as much as he used to, inasmuch as he did not beat her as frequently as before. That stage dance, so popular at the present time, in which the male partner flings and hurls the girl about the floor and ends up by dragging her off the stage by her hair is admittedly sexually stimulating to many of the female members of the audience as well as to many of the males. In brief we can say that masochistic manifestations of various sorts are fairly common among many apparently normal individuals; perhaps, to some extent indeed, among all normal individuals, but particularly among women.

These are some of the facts which taken together with the facts of sexual perversions—to be discussed shortly—are offered in support of the Freudian theory of sex. Let us recapitulate briefly. Autosexual acts are committed at some time by a great part of mankind and at some time or other homosexual acts are committed by many individuals; exhibitionistic, inspectionistic, sadistic, and masochistic activities are undoubtedly normal to the individual if not carried to an extreme. Now, is it necessary that we believe with the Freudians that every individual passes through an autosexual and a homosexual stage and that there are separate sexual tendencies which manifest themselves in the various types of sex behavior just mentioned if we are to understand and adequately explain the various aspects of sex activity in the human individual? In

answering this question we shall endeavor, incidentally, to arrive at some more or less definite conclusion as to what constitutes essentially normal sex activity in the human adult, and then we shall proceed to a consideration of some of the more common forms of sexual perversion.

Let us begin by assuming that there is present in the individual at birth a sex urge or drive, but that as compared to the same urge in the adult it is very weak. Let us make a second assumption that the sex urge may manifest itself in a variety of forms of activity, some of which forms are natural to the early life of the individual while others are not usually present until later. The forms of sex activity natural to the child are exhibitionism (displaying the body, the clothes, etc.), inspectionism (examining the sex organs of others, "peeping," listening to sex talk, talking about sex, etc.), and a certain amount of sadistic and masochistic activity. The one form particularly characteristic of the adult is the act of copulation. But in the adult we find also those forms of sex activity that are present in the child. Usually, however, we shall find that the different forms of activity have become spatially and temporally integrated into one pattern of sex activity. We shall observe, moreover, that the forms of sex activity found in the child are, in the adult, preparatory activity leading up to the final or consummatory act of copulation. Hence from a biological (or teleological) point of view we may look upon the early sex activity of the individual as preparatory to the complete manifestation of the individual's sex urge in adult life, just as the competitive play of boys may be viewed as preparatory to the competitive work of adult life. Consequently there seems to be no justification for assuming that there are several different sex urges simply because we observe different types of sex activity. Hunger may induce crying, or restless move-

ments of the arms and legs, as well as reaching, grasping, chewing, swallowing movements, etc. Yet we assume that all these movements may, in a given instance, be motivated by the same urge.

Neither does there seem to be any good reason for believing that the human individual passes through different stages with respect to the sexual object. A child may accidentally discover that the self-manipulation of its sex organs gives a pleasurable sensation, and we may assume that the sensation is of a truly sexual nature. And now the child may take advantage of any opportunity which presents itself in order to engage in this particular pastime; in short, he develops a habit of masturbating. But we should not for a moment read the same significance into this act on the part of a child that we would in the case of the adult. In fact we know that whereas such a habit might be very easily broken in the case of the child, it is very difficult to break it in the case of the adult unless he is provided with some other sexual outlet. And this indicates that the intensity of the pleasure derived from the act in the case of the child is comparatively slight. In the absence of a strong heterosexual or a homosexual urge, the child could be nothing but autosexual. But since the child is just as pleased if someone else provides the sexual stimulation, he cannot be said to be truly autosexual in the sense that the adult human is who prefers masturbation in every respect to any other kind of sexual act. As the child grows older and becomes a more truly social individual, responding more definitely to other individuals, he is in a favorable position, in the event of deriving sexual pleasure from relations with a member of the same sex, to develop homosexual practices. Yet he is again decidedly different from the homosexual adult who cares only for homosexual practices.

We may now briefly state our conclusion concerning normal sexual activity and desire in the human individual. The individual is born with a sex urge which naturally manifests itself during the early years of life in a diffuse type of activity. Later this urge may become directed toward any individual or object which has proved more or less sexually gratifying. About the time of pubescence the individual becomes normally attracted to members of the opposite sex; and sex activity in the adult normally involves the various forms of early sex behavior which we have mentioned and culminates in the act of copulation. In the adult, at least in the case of the man, the most adequate stimuli for the arousal of the sex urge are the sight of a member of the opposite sex, particularly of the individual's secondary sex characters; physical contact with the individual; and certain bodily postures and gestures. With respect to the sex act itself there are two phases which may be distinguished. The first has been called "tumescence" and is characterized by general sexual excitement and physiological changes which are conducive to the carrying out of the act; and the second, called "detumescence," is characterized by feelings of langour and relaxation, and immediately follows the act.

### **The True Sexual Neuroses or Sexual Perversions.**

1. *Autosexuality or Autoeroticism.* The chief form of this perversion and the only one to be discussed here is masturbation. This practice is so common that it could hardly be termed abnormal were one to apply the sole criterion of its frequency within the group. But since normal sexual activity is so obviously not that of masturbating, we do not hesitate to class it with the sexual perversions. The causes of masturbation are many. Frequently the individual, while still young, is taught the practice by some older person. Once the practice is begun the individual is

inclined to continue it because of the pleasure it affords, particularly if he does not have the opportunity of mixing freely with other individuals of his own age. Hamilton makes a very significant point when he calls attention to the fact that to the extent to which an individual is kept from engaging in a variety of activities, involving the various functions of his body and exercising the various aspects of his mental make-up, to a like extent will he be prone to over-evaluate or stress any pleasure-giving activity in which he may engage. This single observation goes far toward accounting for masturbation. If the lower animal is placed in a cage by itself and kept there, it will perhaps not only masturbate but do so to an excessive degree; if the human individual is placed in a cage built of moral scruples, shyness of others, feelings of inferiority, lack of congenial companionship, etc., he may likewise masturbate and to an excessive degree. It is a fact of general observation among consulting psychologists, psychiatrists, and medical men that the excessive masturbator is usually handicapped in some very real sense in making adequate social adjustments.

Attention should be called to the effects upon the individual of masturbation. There is a considerable mass of literature pointing out the bad effects, physical and mental and moral, of this practice, and if we go back a hundred and fifty years we find that it was believed by many medical authorities as well as laymen to be one of the chief causes of insanity. Unless the practice is begun early and carried to an excess it perhaps leads to no injurious physical consequences. The mental effects, however, are quite another thing. Frequently the individual believes that he is the only person or at least one of a very few individuals who engage in the practice. Moreover, his general moral training, the remarks of his elders concerning unnatural

sexual practices, and the whole attitude of society (at least of western civilization) toward the subject of sex, are wont to make him feel that it is a practice which belongs only to the weak-willed, filthy-minded, and morally degenerate. Once he has come to accept such an attitude and then failed to overcome the habit, he will obviously be greatly handicapped in making adequate social adjustments.

2. *Homosexuality or Sexual Inversion.* Some adult individuals are sexually attracted not to members of the opposite sex but to those of the same sex. Four different forms or degrees of this anomaly are commonly distinguished: (a) bi-sexuality, in which the sex object may be of either sex: that is, it makes little difference to this type of individual whether it is a member of the opposite sex or of the same sex with which he has relations; (b) typical homosexuality, in which the individual prefers a member of the same sex, quite as a normal individual prefers a member of the opposite sex; (c) effemination (in man), viraginity (in woman), in which not only the sexual feelings but the whole mental make-up becomes that of the opposite sex; and (d) androgyny (in man), gynandry (in woman), in which the body approaches in contour that of the opposite sex.

It is undoubtedly difficult for the sexually normal individual to grasp the homosexual's (homosexualist's) point of view, to understand that the latter is just as idealistic and romantic, as sincere and whole-hearted in his homosexual attachments, as the normal individual is in his heterosexual attachments. Yet, as strange as this may seem, it is unquestionably true. The homosexual is not a moral degenerate as society more or less explicitly contends he is; he may and frequently does entertain the highest of personal morals and ethics.<sup>4</sup> He can be quite

<sup>4</sup> In more recent years many writers of note have concerned themselves with the problem of homosexuality with the result that this interesting sociological

as irreproachable in his social conduct, as altruistic in his motives, and as appreciative of life's finer distinctions, as can the normal person. In fact, Carpenter, among other writers, contends that in many respects he is a superior individual.

Homosexuality may manifest itself primarily with respect to strictly sexual relations and functions or it may noticeably color much of the activity of the individual. Thus some homosexuals prefer to dress in the garb of the opposite sex, to engage in those activities which are most typical of the opposite sex, and to spend their leisure moments in the company of the same sex. Many large cities have their gathering places for homosexuals, and late at night one may frequently see even on the street men with painted lips and rouged cheeks and with obviously feminine touches to their dress.

Before mentioning the causes of homosexuality it is necessary to distinguish clearly between true homosexuality and what we might term pseudo-homosexuality. Many individuals who are not true perverts engage in perverted acts of this nature at some time or other; but a homosexual act does not make of the individual a homosexual. Wherever large numbers of the same sex are segregated for some period of time, such as in the army, in schools for boys and in schools for girls, etc., homosexual practices are quite common. Most of these individuals, however, will return to normal heterosexual

and psychological problem is taking on a new and clearer significance. There appears to be some agreement among writers that the true homosexual is usually of an idealistic and romantic temperament and that he inclines toward artistic and literary pursuits. See, for instance, H. H. Ellis, *Studies in the Psychology of Sex*; Edward Carpenter, *The Intermediate Sex*; W. Stekel, *Bi-Sexual Love, the Homosexual Neurosis*; A. Tridon, *Psychoanalysis and Love*. The last writer cites among the great homosexuals of the past, Cæsar, Michael Angelo, Leonard da Vinci, Shakespeare, and Oscar Wilde. It will be impossible in the present discussion to do more than mention briefly some of the outstanding facts of this neurosis.

relationships and interests once the opportunity presents itself. We should not, therefore, speak of these individuals as homosexuals; such practices to them are merely makeshifts just as autosexual practices are frequently merely makeshifts to the heterosexual individual. The true homosexual, as we have said, is sexually interested at any and all times only in members of the same sex.

It seems hardly necessary here to offer explanations of homosexual practices in the normally heterosexual individual. Long before maturity is reached the boy or girl may be taught homosexual practices by an older person or he may accidentally discover them. If they result in pleasure, and if no strong sentiments have yet been developed against them, and if no sexual attachments to the opposite sex have yet been formed, it is entirely natural that the practice should tend to continue. We have said that in the early life of the individual and until the time of pubescence, the sex disposition is loosely organized; the sex urge is not directed toward any specific object or class of objects in the environment and the expression of the urge has no clear-cut pattern. Hence the urge, due to the perceptive and affective factors involved, may readily become directed to any object which arouses it. With the advent of pubescence, homosexual practices are usually given up, due in part to a growing sentiment or aversion to them and in part to an apparently inherent tendency to respond, at about this time, to members of the opposite sex.

Some individuals, however, do not yield their homosexual practices at the time of pubescence; and some develop them at that time or later in preference to heterosexual relationships. This amounts to true homosexuality. Some homosexuals strongly resemble the opposite

sex in physical features: in the general musculature of the body, the general contour of the body, the growth and distribution of hair, the pitch of the voice, etc. In a few cases physical hermaphroditism is found; the same individual possesses the sex organs belonging to both sexes, one set of which, however, is usually more fully developed than the other. Finally, as we all know, each sex normally has the sex organs of the opposite sex, but they are, of course, undeveloped. These facts, together with others, have led some writers to the conclusion that homosexuality is fundamentally due to anatomical and physiological digressions. In other words, there is an incomplete physical differentiation in the sex of the individual, before and after birth; he possesses the physical features to varying degrees of both sexes and along with these the psychical features. Consequently, although his more obvious sex features might belong to one sex, other features less obvious (such as glandular tissue) might be those of the other sex. And this in turn might condition his sex interests and desires in the direction of the sex to which he apparently belongs, but which after all is not so much his own sex as the other is.

Another theory of homosexuality is to the effect that it can be quite adequately explained in terms of conditioning or experience. Although this theory does not necessarily entirely exclude from consideration the one just given, it clearly places the chief emphasis on a different set of factors. It would be out of the question here to discuss it in detail; we can only point out some of the more obvious facts which seem to support it and some of its necessary implications. The first implication is, in keeping with Freud's contention, that the individual to begin with is "polymorphous perverse," which means that the individual is potentially capable of forming a

sexual attachment, or "fixation," to any object or aspect of his environment that gives him sexual gratification. If we assume this to be true—and it seems to be well supported by the fact of the frequency and variety of the sexual perversions known to exist—then we might expect homosexuality to be largely a result of early environmental influences. But if this is the case, we need not hesitate to say that in order for homosexuality to result, the individual must be very definitely and very strongly conditioned to respond fairly early in life in a sexual manner to members of the same sex; for knowing the strength and stability of long-established sentiments, it is inconceivable that a normal heterosexual individual could ever be made over into a true homosexual, particularly inasmuch as the moral standards of society are so rigidly opposed to this form of perversion. Little that is definite can be said of the frequency of homosexuality. In a statistical study of 150 men and of 150 women, Bousfield <sup>5</sup> found that 40 per cent of the men had masturbated,  $\frac{1}{2}$  per cent had been actively homosexual, and 85 per cent had committed normal heterosexual acts; while of the women over 90 per cent had masturbated, between 20 per cent and 25 per cent had performed homosexual acts (mutual masturbation or its equivalent), and only 40 per cent had performed successful heterosexual acts. This study included only their sex activities after the age of twenty. Of these individuals, 130 of the men and 107 of the women were patients. What we said with respect to the necessity of distinguishing between perverted acts and actual perversion must, of course, be carefully considered in all such studies. That autosexual and homosexual activity should be more common to women than to men will not seem strange if, first, we assume that woman

<sup>5</sup> Bousfield, Paul, *Sex and Civilization*, pp. 96-97. Dutton.

has essentially the same intensity of sexual desire that man possesses and, secondly, that both woman's training and the fact of the greater rôle she plays in reproduction tend to limit her heterosexual activity.

3. *Zoöerasty or Bestiality*. Here the sexual object is an animal. Although not so common, still this is a well-known form of sexual perversion. Undoubtedly it is far more frequent in isolated rural districts than in the more thickly settled sections of the country. We may say with a fair degree of certainty that this perversion is primarily due to environmental factors, plus, of course, the sex urge itself. Perhaps the chief contributing factor in most cases is the isolation of the individual, whether this be the result of environmental circumstances or of personal characteristics of the person, such as physical defects, shyness, inferiority feelings, etc. The boy or girl on the farm usually has ample opportunity for observing the sexual activity of various animals. This may arouse a good deal of curiosity and perhaps also sexual excitement. In the absence of proper training, and moral sentiments to the contrary, the individual may himself attempt sexual intercourse with an animal. If the act is successful, if it results in considerable sexual gratification, it may be repeated and soon become habitual. The writer once knew a feeble-minded boy who had an almost unbreakable habit of this sort. Dogs are sometimes employed for sexual purposes by women, and, incidentally, the woman who goes to an extreme in showering attention and affection on her dog is far more frequently an object of suspicion than she ever dreams of being.

The fact of bestiality again points to the loosely organized nature of the sex disposition in the early life of the individual. And here again we find corresponding perverted sex acts in some of the lower animals. The writer

has often observed dogs trying to mate with hogs, male turkeys with female chickens, and drakes with hens. To say that the individual is naturally attracted sexually to the lower animals would be an absurdity; to say that in early life he is attracted to no specific class of objects but that he may become attracted to any object that results in sexual pleasure seems to be well supported.

4. *Pedophilia Erotica*. This term is used to designate those cases in which the sexual object is an immature child. Some adults are strongly attracted to children instead of to adults. Undoubtedly many cases of rape of children are committed by individuals belonging to this class. Of the various explanations which have been offered of this perversion two may be mentioned.

Due to sexual experiences during childhood, the individual becomes conditioned or dependent, so to speak, on this particular class of objects for sexual arousal and gratification. Thus the little boy may have sex experiences with a little girl or with another little boy. Later, because of his training and the development of sentiments antagonistic to his sex practices, he inhibits all overt sexual manifestations until, say, the time of pubescence. At this time the sex urge becomes stronger and the individual is unable any longer to ignore it. But it is now aroused not by girls of his own age but only by little girls or boys. In short, no change or development with respect to his sexual disposition seems to have taken place since the time when he gave up his overt sex practices.

The other theory is to the effect that pedophilia is found only in individuals who feel incompetent to meet the demands of individuals of their own age, usually not only with respect to sex but with respect to life situations in general. They have never made an adequate adjustment to adult life. Consequently, when in the presence

of members of the opposite sex of their own age, feelings of inferiority and inadequacy tend to inhibit or block any sex desire which might arise. On the other hand they feel perfectly at ease around children and hence the sex urge which has failed to find an adequate outlet becomes aroused by them. The fact, however, that pedophilia may persist in the individual who has had a varied sex activity with mature individuals suggests the probability of early conditioning factors of a definitely sexual nature. Perhaps a combination of the two theories would afford a better explanation.

5. *Necrophilia*. In this perversion the sex object is a cadaver (a dead person). Although this perversion is definitely known to exist, too few cases have been carefully studied to permit of generalizations. Like certain other sexual perversions, this one assumes the nature of a compulsion, sometimes causing the individual to disinter graves and commit the most atrocious acts upon the occupants, while all the time he is completely aware of what he is doing.

6. *Sexual Frigidity*. This apparently is far more common in women than in men and is undoubtedly in most cases the result of environmental influences. The time is not yet past when the little girl is taught in a thousand and one ways to ignore all allusions to sex, to try in every way possible to remain in ignorance, and even to look down upon it as something nasty and unworthy of a self-respecting girl. Little wonder that she often develops a veritable barricade of sentiments and attitudes against any manifestation of sex in herself or recognition of it in another. She is taught to be frigid and her teaching is often very thorough; as a consequence she becomes frigid. Again, frigidity may result from early sex experiences followed by repression, as in the case cited from Hamilton

in Chapter VII. Still again it may result from tactlessness and rudeness on the part of her partner in her first sexual experience. This is only too often the case in the young woman who has been over-strictly brought up, who has been kept in almost total ignorance of the nature of sex and who, as a result, has erected an absurd system of fantastic notions concerning it. Upon marrying, therefore, she discovers in it so much that is opposed to all her *dreams* that she is completely revulsed and overwhelmed. How many "disillusioned" young women say with scorn and considerable disgust that man is nothing but an animal. The trouble is that they have been made to believe that they themselves are fundamentally something else than animals. A wholesome attitude toward sex or anything else can come only when the facts concerned are recognized and admitted, and this before the individual has developed sentiments which are strongly opposed to the recognition and acceptance of the facts. Whereas in early Sparta, young men and women wrestled with each other in the nude, and undoubtedly with no loss of moral integrity to either, in our present western civilization the exposure of the body, even unintentionally, is a moral offense. It is perhaps safe to say that nine out of every ten girls in the United States are made ashamed of their sex organs, not because, as the Freudians seem to contend, these are not like the male's genitals but rather because the little girl is taught that concealment is the first and fundamental law of morality and respectability.

7. *Satyriasis and Nymphomania*. The first term applies to men, the second to women. This disorder is not so much a perversion as it is an exaggeration of sex feeling, desire, thoughts, and perhaps overt activity. Some individuals are obsessed with thoughts and fancies of sex. These thoughts intrude themselves at any and all times,

interfering with their work and play and activity in general. Nymphomania (to use only the one term) perhaps more frequently belongs to Class 1 of the sexual neuroses mentioned at the beginning of the chapter than it does to the true sexual neuroses. Sex activity, like any other general type of activity, may become largely compensatory, as appeared to be true in the case, already cited, of the young woman who gave herself to each newcomer as a method of reassuring herself that she was not without personal charm. On the other hand, nymphomania may develop as a result of no adequate outlet for the sex urge, particularly if the individual is living in an environment which is sexually stimulating. Thus one young woman who was greatly troubled by obsessive sex thoughts and fancies was found to be living an almost isolated existence from others of her own age, largely because of her own timidity and difficulty in making friends. Consequently, lacking any normal means of sex expression, such as is afforded to a considerable extent by dances, parties, and general social intercourse with members of the opposite sex, she came to over-evaluate sex just as the individual may tend to over-evaluate physical sports or music, or literature, or any other type of pleasure or activity from which he is barred. This over-evaluation led to an exaggerated attempt to find sexual gratification through the medium of fancies and day-dreaming. Also we must recognize the probability of a considerable degree of variation among individuals in the intensity of the sex urge and consequently in the need for sexual gratification. This variation is undoubtedly in part a matter of inherent constitution but also in part a matter of the age at which sex activity actually begins, in the narrower sense of the term. There is considerable evidence that the premature awakening of sex interest and the early activation of the

sexual mechanism tend to lead to a more persistent and intense sex desire in adult life than would otherwise be the case. On the other hand it would appear that if the individual remains chaste till the age of thirty-five or forty and then marries, sex desire tends to be less intense, due probably to the fact that his energies have long since become largely "habituated" to other forms of expression.

8. *Exhibitionism and Inspectionism.* These terms properly apply to the individual whose chief mode of sexual gratification consists of the act of exhibiting himself to other individuals, usually members of the opposite sex, and of inspecting the bodies of others. The second tendency often leads to habitual "peeping"; such an individual is technically known as a *voyeur*. We have already spoken of the biological significance of these two forms of behavior and of the fact that, if not carried to an extreme, they belong to the normal sex pattern of behavior of the adult. They are sometimes carried to such an extreme, however, that the individual may obtain complete sexual gratification in only one of these two ways. Some of these individuals are characterized by both of these abnormalities, others by only one or the other. Perhaps in most cases the abnormality can be adequately accounted for in terms of conditioning and certain other factors. To begin with, it is obvious that it is sexually stimulating to most women to be looked at lustfully by a male who is a good physical specimen and who has no obvious defects. Likewise it is stimulating to the male to look at the body of the female, provided the body is well formed. Now if the male should reach a state of sexual excitement sufficient to bring about an orgasm while viewing the body of a female, it is quite conceivable that thereafter the sex urge might tend to express itself wholly in this merely preparatory form of sex activity. In other words the sex

urge becomes confirmed in, and restricted to, this particular type of manifestation. The reverse of this would hold in the case of the female. However, the reader must not infer that exhibitionism is exclusively characteristic of the female and inspectionism of the male, for this is not the case. We have already pointed out that perhaps no specific form of sex activity is exclusively characteristic of only one sex. Even among the lower animals where innate dispositions are assumed to be relatively highly organized, a member of one sex will frequently go through that type of sex activity which is usually characteristic of the opposite sex. Thus cows will often ape the sex pattern of activity of the bull, and a male dog will often assume the female rôle in connection with another male dog that is larger and more aggressive.

To what extent the tendencies to exhibitionistic and inspectionistic behavior exist in man is largely speculative, due in part to the fact that both are given ample opportunity for expression in socially acceptable manners. Thus the "sex show" permits of the expression of both to a considerable extent, as do also bathing costumes and more recently, even street clothes.

9. *Sadism and Masochism.* The individual who derives sexual gratification from inflicting pain on another person is termed a *sadist*; and the person who derives sexual gratification from having pain inflicted upon him by another person is termed a *masochist*. These two forms of perversion taken together are usually spoken of as *alloglagnia*. Here again we appear to be dealing with manifestations which when not carried to an extreme belong to the normally integrated sex pattern of behavior. (And again we assume that when either the one or the other is carried to an extreme that we can account for it in terms of factors of conditioning. Cases have been reported in which

men paid boys to let them inflict bodily punishment, sometimes using a horse-whip. And cases have been reported in which essentially the reverse of this was true. That the pleasure derived in both cases was primarily sexual in nature is well established.

Throughout the animal kingdom examples abound of sex activity and physical pain going hand in hand. It is sufficient to cite the example offered by the sex activity of cats. The screaming and howling of cats during mating is certainly not entirely a direct expression of sex desire but in part a result of the physical pain which each inflicts upon the other in the act of copulating. Moreover, both among the lower animals and in many primitive human societies, it is frequently necessary for the male to overcome the resistance of the female before the sex act can be consummated. Hence it is not wholly improbable to assume that sex activity and pain-inflicting activity have become genetically associated. In the life of a given individual the two may become associated, as in the case of the too rough lover who not only arouses sex desire in his mistress but at the same time inflicts pain. In keeping with the known laws of conditioning, the pain may come to stand as the principal stimulus to the arousal of sex desire.

10. *Fetichism*. When the sex urge becomes directed toward some inanimate object or toward some single part of the body other than the sexual parts, the perversion is known as *fetichism* and the sex object as a *fetich*. There is every degree of fetichism from that represented by the typical lover who values some article of clothing because it belongs to or has been worn by his sweetheart to the case of the individual who can be sexually aroused only by the presence of some inanimate object such as a glove, a shoe, a pocketbook, a handkerchief, an article

of underclothing. Apparently the process of ordinary conditioning will go far toward accounting for fetichism. During childhood an individual is extremely fond of some person who has red hair, or has a dimple, or who wears a certain color a great deal. Upon reaching adulthood he is sexually attracted to individuals who display the same trait, although he may not realize the specific basis of his attraction. Or, and this perhaps applies to the more extreme cases of this perversion, an individual is sexually attracted to a certain person but because of certain moral scruples or perhaps incest taboos he endeavors to conceal and even repress his sex feelings. If repression follows, some article or feature associated with the person he loved may assume the value of a sex object. The person may then neither know the origin nor the nature of his attraction to the particular class of objects or the peculiar feature which constitutes his fetich.

The whole problem of sexual perversions or neuroses still remains relatively obscure. Only future careful investigations will enable us to speak more definitely and more exhaustively of them.

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## CHAPTER XII

### THE PSYCHOSES

#### [MANIC-DEPRESSIVE PSYCHOSIS]

**Some General Facts about the Psychoses.** In passing to the matter of the psychoses, the reader must prepare to discard all preconceptions of the nature of "insanity" and to look with a critical but unbiased eye upon a large group of phenomena with which he is likely to be unfamiliar. For most people know almost nothing of the nature or even of the existence of the more serious mental disorders—a rather surprising fact in view of their prevalence. According to a census taken in 1920, there were at that time 232,680 persons in hospitals for the mentally diseased. In addition to this there were 18,268 patients on parole, escaped, or otherwise on the books but not actually in the institutions, making a total of over 250,000 individuals.<sup>1</sup> Of this number, approximately one-half belonged to one or other of the three groups of functional psychoses which we shall discuss in this book. The remainder were distributed among some fifteen or more other psychotic groups, comprising the toxic and organic psychoses.

It is to be regretted that we cannot take the reader for a visit to a mental hospital and point out along with our discussion the facts of which we speak; for to talk about or to teach the psychoses without actually having patients at

<sup>1</sup> Pollock, H. M., and Furbush, E. M., "Patients with Mental Disease, Mental Defect, Epilepsy, Alcoholism, and Drug Addiction in the United States, January 1, 1920," *Mental Hygiene*, Vol. 5, pp. 139-169.

hand, or without having seen such patients, is comparable to talking or teaching chemistry or physics without any laboratory work. In order properly to appreciate the facts of which we shall soon speak, it is almost essential that these facts be observed firsthand. Hence it is strongly advised that if the reader has never visited a mental hospital he should take advantage of the first opportunity to do so, whether he is particularly interested in abnormal psychology or not. In all probability no one ever came out of a mental hospital—either as patient or visitor—without having gained a somewhat new and broader perspective on human nature. These remarks do not hold with respect to the psychoneuroses, which we have discussed, since, in the first place, one need not go to mental hospitals or hospitals of any kind to meet with this type of patient, and, in the second place, the psychoneurotic does not present a sufficiently different picture from the normal person to give much new insight into the potentialities of human nature. Moreover, in studying the psychoneuroses it is possible by means of hypnosis to induce with sufficient accuracy and detail many of the objective conditions presented by patients of this class for purposes of demonstration. But it is quite impossible to induce in a hypnotic subject anything closely approaching true psychotic reactions. However, there is no intention on the part of the writer to lead the reader to believe that unless he has seen psychotic patients it is useless for him to study about them; it is merely suggested that he take advantage of his first opportunity to see and observe firsthand the reactions of this class of individuals.

**Concerning Terminology.** Before beginning our discussion proper it is necessary to say a few words concerning terms. The word *psychosis* has two current meanings: (a) It is used to designate any one of a large class of abnor-

mal or disordered mental processes or reactions, and (b) it is also used to designate any one of various more or less typical mental syndromes (symptom-complexes or non-adjustive reaction-pictures). When used in the latter sense some qualifying term is employed with it, such as manic, toxic, etc. The term *insanity* is rapidly going out of use within psychiatric and psychological circles. It has a fairly definite medico-legal and sociological connotation, implying a more or less permanent loss of the ability, as a result of severe mental disturbance, to make an adequate social adjustment and to assume social responsibilities and therefore the necessity of commitment. *Dementia* implies a general loss of intelligence. *Orientation* refers to the knowledge of time and place and personal identity. The patient is said to be disorientated if, for instance, he does not know the season of the year and the approximate date, or where or who he is. The term *insight* refers to the patient's perspective on his own condition. For instance, he is said to lack insight if he contends that there is absolutely nothing mentally wrong with him. Other technical terms will be defined as they are taken up.

About 15 per cent of the total admissions to mental hospitals are cases of manic-depressive psychosis. This constitutes roughly about one-third of the whole group of functional psychoses.<sup>2</sup> The term *manic-depressive psychosis* or *manic-depressive insanity* has largely supplanted the older terms *mania* and *melancholia*. It was formerly believed that mania and melancholia were two distinct mental disorders. But Kraepelin and others discovered that the two conditions are frequently found together in the same patient, and moreover it gradually became clear that the two disorders were really opposite forms of mani-

<sup>2</sup> An available source for these and other statistics relating to the psychoses is Pressey, S. L., and L. C., *Mental Abnormality and Deficiency*. Macmillan.

festation of the same basic factors. Hence Kraepelin suggested as being more adequate the single term manic-depressive psychosis. Observations have since tended to support Kraepelin in many respects, and consequently we now no longer speak of mania and melancholia in the sense of their being two different mental disorders but rather we use them, if at all, to characterize two different phases of the same disorder.

**Some General Aspects of Manic-Depressive Psychosis.** Manic-depressive psychosis has been aptly characterized by Pressey as the "psychosis of emotional extremes." The classical case presents as its fundamental features states of extreme excitement in alternation with states of extreme depression. Both states or phases appear equally to involve the thought processes, the emotions, and the motor reactions. In other words, all three aspects of the typical mental disposition, or of the personality, are involved. The degree of excitement and of depression, however, varies greatly with different patients, and, likewise, there are actually but relatively few patients in whom states of depression alternate with states of excitement in a strictly regular manner. More frequently the patient manifests only one of the two phases or else the phases alternate in an irregular or mixed order.

With respect to excitement and to depression three degrees are commonly distinguished. In order, from the most extreme excitement to the most extreme depression they are: *hyperacute mania*, *acute mania*, *hypomania*, normality, *simple retardation*, *acute melancholia*, *stuporous melancholia*. This implies that depression or melancholy is exactly the opposite of mania or excitement, an assumption which is apparently made by most psychiatrists. But McDougall points out, and seemingly with adequate justification, that the true opposite of excitement is not

melancholy or depression but rather passivity or calmness;<sup>3</sup> and likewise that the opposite of depression is exaltation. If this is true it behooves us to examine the facts carefully and try to determine exactly what characterizes these two phases, mania and depression.

The most outstanding feature of *hypomania* is the individual's attitude that "God's in his heaven, all's right with the world." His every thought, every action, every emotion, is in keeping with such an attitude. He is blinded to the dark side of anything and everything. He resembles to a very striking degree the person who is moderately intoxicated. He reacts quickly and joyously; a smile is on his face, he is immensely pleased with himself and intensely eager to taste of life in its fullness. If his reactions become concentrated along one line, that is, toward some definite goal, he applies himself with unusual vigor and enthusiasm. Perhaps he desires to bring about some social reform. Then he will talk and write incessantly, rapidly filling page after page, condemning, arguing, extolling. The hypomaniac is not only excited; he is obviously exalted. Although he sometimes manifests irritability and ill humor, this is not frequent and is usually the result of being thwarted in following out some desire. If left to his own devices his behavior is strikingly self-assertive, resulting in his thrusting himself often, however, with right good humor, into the affairs and activities of all those around him. His speech is quick and usually loud, his writing is large and shows haste, and his manner is unusually self-assured—it is next to impossible to break down his composure, his bearing of self-sufficiency.

*Acute mania* is simply hypomania exaggerated. Such an individual shows even greater intensity in his reactions; his attention is more distractible, shifting with surpris-

<sup>3</sup> McDougall, Wm., *Outline of Abnormal Psychology*, p. 355. Scribner.

ing rapidity from one thing to another without end. His talk is not only extremely rapid but may reach a stage of complete incoherency, spoken of as "flight of ideas," "word salad," etc. His facial expressions and general manner are in keeping with the intensity and rapidity of his motor reactions; his eyelids are distended, his eyes bulging, his gestures violent, his manner unusually aggressive. If he is crossed in what he is doing he may fly into a violent rage, threatening his disturber with death and venting his anger by destroying the furniture, or by yelling, screaming, swearing, etc. On the other hand if he is not crossed he may simply be unbearably jovial and aggressive in his behavior, manifesting a tremendously inflated self-esteem and an extreme inconsiderateness of others. His judgments are likely to be extremely erratic and fanciful; his remarks, however, although incoherent as a whole, are frequently very pointed and clever. Like the hypomaniac he can always be depended upon to amuse the visitor, usually choosing someone from his audience to whom to address his remarks.

In *hyperacute mania* the individual reaches a stage of veritable delirium. He conforms fairly closely to the popular conception of the "madman." His talk is entirely incoherent, so broken and unrelated as often to make it impossible to gather any meaning from what he is saying. His actions are extremely violent; he tears his hair, breaks the furniture, attacks other patients. He sings, laughs, dances, raves, and tears about the ward in a perfect frenzy. It may be necessary to restrain him in some way to prevent utter exhaustion; for his activity is constant, permitting neither of rest nor sleep. It was particularly with respect to this class of patients that, a hundred and fifty years ago, bleeding was used to a great extent as a means of quieting them, and thereby conserving their energy (!).

The patient in the depressed phase presents a picture which in many respects is diametrically opposed to that of the manic patient. In the case of *simple retardation*, the thoughts and motor reactions are noticeably slower than normal. Contrasting it with the manic phase we may point out that the smile is gone from the face and replaced by an expression of sadness; the buoyancy is gone from the step, the snap from all the movements; the self-assured mien has given way to a hesitating, uncertain, and backward manner. The patient responds slowly and without interest to questions; his writing is slow; apparently all his mental processes are retarded.

In *acute melancholia*, depression and a tendency to self-depreciation are obvious. In the mind of the patient these two factors are usually related in a causal manner. Thus one patient slowly paces the floor weeping, moaning and wringing her hands, because, according to her, she is guilty of some unpardonable sin. Another declares that she is the most worthless creature living, that she has led a vile and sinful life, and that she does not understand why others let her live. Attempts to commit suicide are always to be guarded against during these phases.

The patient who is in a state of *stuporous melancholia* is difficult of study since it is often impossible to get him to respond to questions. He may sit in one place in the wards day after day, appearing to be in a state of complete dejection, body drooping, chin resting on the chest, tears trickling in an endless stream down the face. Since these patients usually have some memory for the period of depression upon recovering from it, it is possible to learn something of their emotional and mental state from their own retrospective accounts. Hoch<sup>4</sup> has made some interesting and fairly intensive studies of patients of this

<sup>4</sup> Hoch, August, *Benign Stupors*. Macmillan.

kind, and these studies, together with the observations of others, show that such patients are always harboring some absurd conviction of sin or wrongdoing. One patient believed that she had been the cause of the World War and was consequently overcome with grief and self-reproach. Another believed herself guilty of some awful crime for which she was to be put to death and that the attending physicians were her executioners. Often such patients misinterpret the kindest of attentions from the nurse or doctor as so much deliberate torture, which, however, they may passively accept.

Now inasmuch as either depression or exaltation may be accompanied by psycho-motor retardation or by psycho-motor acceleration, it is obviously impossible to distinguish between the phases of mania and depression wholly in terms of the quickness and intensity with which the patient reacts. That this is true is clearly shown by the following table of mixed forms.<sup>5</sup>

	<i>Affectivity</i>	<i>Association</i>	<i>Action</i>
1. Depressive mania	—	—	+
2. Akinetic (gehemmte) mania	+	+	—
3. Agitated depression	—	+	+
4. Maniacal stupor	+	—	—
5. Unproductive (gedankenarme) mania	+	—	+
6. Depression with flight of ideas	—	+	—

In the table given above the plus sign (+) indicates manic disorders, that is, acceleration and intensification; the minus sign (—) indicates depressive disorders, that is, retardation and apathy. Hence we see that in the depressed state the individual is not necessarily characterized by retardation with respect to all three of the major aspects of the personality, namely, affectivity (emotion and

<sup>5</sup> Bridges, J. W., *Outline of Abnormal Psychology*, p. 155. Adams.

feeling), association (cognition), and action (tendency or conation). The reverse of this is likewise true with respect to the manic state. Apparently the one constant characteristic of one of the two typical phases of manic-depressive psychosis is a basic feeling of elation, exaltation, euphoria, importance, while the one constant characteristic of the other typical phase is a basic feeling of dejection, mental depression, melancholy. More usually the first of these two feelings is accompanied by a speeding up and intensification of the cognitive processes, certain types of emotional reactions, and of the motor reactions. The second feeling is accompanied usually by a retardation of the cognitive processes, by an emotional apathy in many respects, and by a retardation of the motor reactions. It is to be remembered, however, that mixed or composite forms are fairly common and consequently that it is always necessary to study a given state in relation to the various major aspects of the personality. Perhaps a more truly descriptive term for this particular mental disorder than manic-depressive psychosis would be some such expression as "exaltation-dejection" psychosis.

Besides the different forms of manic-depressive psychosis which we have mentioned, we find others when we turn our attention to the various temporal relationships existing between the manic and depressive phases. Some few individuals pass from normality through a period of mania and back to normality, where they may remain for years without any return of the disorder. Others similarly pass from normality through a period of depression and back to normality. Still others are characterized by a recurrent mania, or a recurrent depression—the successive manic or depressed episodes being separated by periods of normality—or an alternation of periods of mania with periods of depression, with or without periods of normality

intervening. In short the following periodic and circular forms have been distinguished. (a) Recurrent mania, in which periods of mania alternate with periods of normality; (b) recurrent melancholia, in which periods of melancholia alternate with periods of normality; (c) alternating insanity, in which the manic and depressed phases are separated by periods of normality; (d) insanity of double form, in which depression is immediately followed by mania, or vice versa, a period of normality then intervening, followed by a period of depression and then a period of mania, etc.; (e) circular insanity, in which there is a continuous alternation of periods of mania with periods of depression; and (f) irregular forms, in which there is no definite sequence of states. If we indicate mania by the letter M, depression by D, and normality by N, then the forms just mentioned may be indicated as follows: (a) MNMNMN, etc., (b) NDNDND, etc., (c) DNMNDNM, etc., (d) MDNMDN, etc., (e) MDMDMD, etc.

The sudden change from a state of mania to a state of depression, or vice versa, to be observed in many manic-depressive patients, is one of the most interesting as well as baffling facts to be found in all mental phenomena. The writer recalls a patient, a woman in her early thirties, who clearly manifested this phenomenon. During her manic phase she was typically hypomanic, occasionally bordering on acute mania; she was extremely talkative, unusually witty in her remarks which were not without allusions to sex, voluntarily took the other patients in her ward in charge, and all in all though a bit forward was a very charming person. Such a period would last for some weeks when literally speaking she would change over night to an entirely different sort of person. With the onset of the depressive phase she would appear suddenly

to have aged eight or ten years. Her face wore a sad, hopeless expression, her movements became suddenly slow and uncertain, her talk and actions were those of the unusually reserved and modest person, and she could no longer see joy or fun in anything.

The change from one phase to the other is not usually so sudden, however, and if one knows the patient well he can usually detect evidence of the change which is taking place some time before it has become obvious. With respect to the duration of these phases, they vary from a period of days to years. Usually, it would appear, they continue for a period of several weeks or months.

We have endeavored to give the reader a general picture of the manic-depressive patient, essentially what one might observe during an hour's visit to a mental hospital. A closer and more detailed study reveals other facts, some of which must be mentioned. Following our discussion of these we shall give one or two typical cases and then consider some of the supposed etiological factors and interpretations of this disorder.

**Symptomatology of Manic-Depressive Psychosis.** A very common symptom of manic-depressive psychosis, occurring in all the various forms, is *general imperception*, a general inadequacy of perception. The various stimuli or aspects of the situation to which the individual's attention is directed are likely to be vague, uncertain, and strange. If a manic patient is requested to read a news item and then to give an account of it ten minutes later, chances are he will have only a very vague memory or no memory at all of what he read. This is to be expected from the extreme distractibility of attention which this type of patient manifests. He does not readily recall what he read simply because his constantly shifting attention was not sufficiently concentrated upon what he was reading

at the time. In other words he did not adequately perceive or apprehend what he was reading. In the case of the depressed patient it is difficult, to the extent of the depression of stupor, to elicit or attract the attention. He may apparently attend to what is being said or to what he is reading or to what he is doing, only to show unmistakably a minute later that he did not hear (*i.e.* clearly perceive) what was said or notice what he was reading or doing. Inattention and its consequent imperception naturally result in *anterograde amnesia*.

Except in the more extreme degrees of stupor and excitement there is no impairment of "consciousness" and orientation. In the extreme states there is frequently what is spoken of as "clouded consciousness" and disorientation. During a state of clouded consciousness there is a poor apprehension of the external world (Kraepelin), everything seeming more or less obscure and indefinite, very much as is normally the case with respect to "marginal consciousness." This of course is largely a matter of inference from the observable fact of the patient's confused and incoherent behavior. The patient appears uncertain and confused in his reactions and may not be clear as to where he is or as to the time of day, month, or year.

A fairly common symptom is the *impairment of judgment*. We have already noted the fact that some patients, the more serious cases, harbor some false belief (delusion) and that much of their behavior is definitely in keeping with this belief. Obviously, when such is the case the judgment is going to be impaired simply because their delusion exerts a definite influence upon their estimations and evaluations. For instance, it is easy to understand that a patient who believes he has committed some atrocious crime might readily interpret, say, a whispered

conversation between doctor and nurse as a plot to put him to death, instead of perceiving in it an attempt to maintain quietness in the ward. The delusions of the depressed patient are usually of a self-accusatory and hypochondriacal (morbid anxiety and worry concerning one's own body and health) nature. They are in keeping with the basic feeling of dejection and worthlessness which characterizes the patient during the depressed phase. On the other hand the manic's delusions are expansive in nature. In keeping with his feeling of importance and inflated self-esteem he may readily come to believe that he is the most important person living, that he has a plan which will revolutionize civilization, or that he is the inventor of some instrument or device which will definitely improve the welfare of every person in existence. Or he may believe that he has discovered an administrative policy which should immediately be put into effect in all mental hospitals, beginning with the one in which he lives. He thereupon demands an interview with the superintendent in order to lay his plan before him. Or he may write long letters to the governor of the state, the mayor of the city, or the president of the United States, expounding his views. Needless to say he is unable to understand why others do not at once recognize the infallibility of the plan which he advocates. Not only out of fairness to these patients but also in justice to the actual facts it should be pointed out that not every expansive notion, semi-delusion, or delusion of the manic patient is simply a "fool-idea."<sup>6</sup>

In the more extreme states of depression and mania,

<sup>6</sup> It will be well worth the reader's time to learn how one manic patient's expansive semi-delusions, after being somewhat corrected and modified following the patient's recovery, initiated a nation-wide move in the direction of improvement of conditions in mental hospitals. The story is told by the patient himself in the book, *The Mind that Found Itself*, by C. W. Beers. Doubleday.

*illusions* are fairly common and even *hallucinations* sometimes occur. Thus one patient mistakes a visitor for her long-missing son, rushes to him, and throws her arms about his neck (illusion or false perception). Especially during the night some of these patients have hallucinations; one hears voices, another complains that men enter her room during the night with evil intent. The significant thing about the illusions and hallucinations of the manic-depressive patient is that they are usually in keeping with the patient's mood and with the tendencies which are most active at the time. Thus while the manic may see in the visitor her lost son, which would be in keeping with her mood of elation, the depressed patient is more likely to see an enemy in the visitor or to hear voices accusing her of various crimes, or threatening her with eternal damnation for her wrongdoings.

Finally we might mention the striking change which occurs with the transition from one phase to another with respect to the innate dispositions which are brought into play, a point upon which we have already touched in a general way. During the manic phase *anger* is easily aroused, *sexual desire* is readily awakened, and the *self-assertive disposition* is clearly manifest in almost every action. On the other hand it is usually more difficult to arouse anger or sex in the depressed patient, *fear* is usually manifest in some degree, and the *self-submissive disposition* appears definitely to color all the behavior. In short, we can say that those dispositions which normally manifest themselves in positive and aggressive behavior are largely dominant during mania while in depression those dispositions which are manifested in negative and withdrawing reactions are dominant. If a depressed patient is ordered to take a seat in the back part of the room he will ordinarily comply without the slightest

murmur; if a manic patient is given a similar order, nine chances out of ten he will openly resent it and at the same time try to usurp the "center of the stage." Again, the talk of most manic patients, or at least of a great many, runs to sex more or less, whereas the depressed patient seldom refers to sex either by word or action. In fact it is only when we relate these two pictures presented by the two typical phases of manic-depressive psychosis to the various innate dispositions of the human individual that they (the pictures) assume any real degree of unity and coherency.

The following excerpt from a case reported by Strecker and Ebaugh clearly illustrates some of the facts we have mentioned.<sup>7</sup>

CASE 26. During the depressive phase, Mrs. T. is inactive, her posture and facial expression portray dejection, bent shoulders, wrinkled brow and drooping mouth. Her speech is never voluntary and her replies are almost monosyllabic. It is apparently an effort for her to move with ordinary rapidity (*psycho-motor retardation*). She answers questions slowly and after an interval of time (*retardation*) in simple language (*poverty of ideas*) and seems relieved to be left alone. She feels "very miserable" and "different," "can't be interested" (*emotional depression*); "don't want to move," "can't do things with head or body" (*inadequacy*); head is "clouded," "thick," "dull" and "confused," "mind blank," "stoppage in thinking" (*possibly slight clouding of consciousness*); "bowels feel horrid," "brain lacks nourishment" (*indication of somatic delusional formation*). There is no evidence of self-accusation. The patient is oriented; memory, retention and recall, counting and calculation, reading and recall, attention and capacity, current knowledge are impaired, not intrinsically, but dependent on the psychic retardation. She cannot recall the details of the excited phase, but is fairly clear about the events of her pre-psychotic life. There is some degree of insight, "I am sick," "very sick," "my head," "all over," "my stomach and abdomen."

<sup>7</sup> Strecker, E. A., and Ebaugh, F. G., *Clinical Psychiatry*, pp. 172-175. Blackston.

With the lifting of the depression, it is as if a new individual had come into being. In the words of the patient—"it drops like a curtain and rises like a curtain." We now see a woman who is a whirlwind of misdirected energy, seemingly at the mercy of variable and rapidly shifting emotions. She passes quickly about the ward, laughing, singing, dancing, attempting to interfere with the care of other patients (*psycho-motor activity*). Any attempt to curb her happy activity calls forth a torrent of coarse abuse, threats, and even actual violence. Often like a mischievous child, she may change suddenly, as when the nurses seek to dissuade her, but then she may try to choke them or kick, bite, and scratch like an infuriated animal (*mercurial affect*). Not infrequently she will break the dishes on her tray and smash panes of glass (*uncontrolled motor activity*). If left alone in her room it is, in a few minutes, in a state of chaotic disorder, crudely drawn sketches soon adorn the walls and the patient has arrayed herself in the most fantastic fashion. For instance, "she has a head dress made of grape-fruit rinds, feathers, and red cord from a torn bathrobe. Arms, legs, pelvis, and bust are bound with red rags and feet with white" (*self-decoration*). She is singing, dancing, and shouting, "I'm a copper-colored maiden." Often the patient is nude. Untidiness is the rule. If not prevented, she will void urine on the floor and smear it on the walls (*regression tendencies*). There is distractibility of attention and the speech reveals the widest range of pathological ideational over-activity. The constant stream of words shows the influence of external and internal associations, sound association, neologistic (*new word*) formation, and flight of ideas. In five minutes the patient introduced eighteen widely divergent subjects and was then further away from the goal idea than at the beginning. Usually, the productions are interlarded with indescribable profanity and obscenity. Occasionally, speech may become incomprehensible and a jumble of hoarse, indistinguishable sounds indicates that a crescendo of incoherence has been reached. "Sweetheart and lieber schatz, also your old fussy sone of a yard, I mean field, come to me, a violent lunatic calls, balls, she is suffering from lunatic or chronic, crazy, catitus. Will you and — come to a Hallowe'en party dinner and dance at 5.30 to 9.30 P. M? There will be at least 100 crazy loons and 100 nurses, also your friends from east, also your former enemies. Mr. B. has fallen. Louis will bring a zither player, a glass of wine, some angel cake and you—music that I heard with you was more than music—

bread that I broke with you was more than bread—Meta” (*flight of ideas, sound association, distractibility, neologistic formation*)—numerous plans are spoken of, trips, lavish entertainments, dinners, publication of books, newspapers, etc. While the usual mood is one of boisterous happiness, the most casual incident serves to change the picture and in the fancies, ideational and motor activity may be witnessed a veritable kaleidoscope of emotions—euphoria, exhilaration, exaltation, boastfulness, pride, irritability, anger, hate, murderous rage. The patient is grandiose, “owns the world” and designs “wonderful” complicated and impossible inventions. There is, occasionally, a curious hallucinatory (*possibly illusional*) delusional trend with a basis of erotic fancies. There are snakes in the room, the physicians force her to take aphrodisiacs, strange men come to the room at night to seduce her. During the manic phase eroticism is to the fore. . . . Relatively, the sensorium is clearer during the active state. “My mind is clearer.” Rarely is orientation disturbed. Memory is good. Events of early life and of the whole psychosis are easily recalled. For instance, from excitement to excitement, she readily remembers the word caricatures with which she describes those who come into contact with her, but during melancholia there is no recollection of them. When the hyperactivity does not preclude testing—retention and recall, counting and calculation, reading and recall, school, general and current knowledge are not seriously impaired. There is voluminous writing, blotted and untidy, capitalized, underscored, and illustrated by crude drawings. Insight is very defective and does not approach the judgment of the depression.

**Some Theories of the Nature and Cause of Manic-Depressive Psychosis.** There are many theories as to the causes of manic-depressive psychosis. Pressey says, “Manic-depressive insanity is *the* strikingly inherited psychosis,” and he is merely voicing largely the consensus of opinion.<sup>8</sup> Bridges, a well-known authority, states that an hereditary taint is found in about 80 per cent of cases.<sup>9</sup> But to say that a mental disorder is due to heredity is at best a very vague and almost meaningless state-

<sup>8</sup> *Op. cit.*, p. 165.

<sup>9</sup> *Op. cit.*, p. 156.

ment. It is true that the manic-depressive patient usually comes from a family in which is to be found manic-depressive psychosis, "psychopathic personalities," "neuropathic personalities," chronic alcoholism, "sexual irregularities," or some other oddity of human nature. But if all normal families were carefully studied, how many, we wonder, would escape "hereditary taint!" For purposes of illustration let us assume that an individual inherits, to a greater extent than the average person does, a basis for reacting with depression to failure, to obstacles, to personal limitations, etc., but that this individual (let us call him A) grows up in an ideal environment, an environment which is not too easy nor too hard but which is such as to be conducive to the development in him of such sentiments and attitudes, such a mental organization, as will result in normally adjustive reactions. A, then, we shall assume, goes through life without developing any manic-depressive or other mental symptoms. B is a second individual whose inherited constitution is the same as A's. But B grows up in an environment which is not conducive to the development of the proper sentiments and attitudes; his early teaching and environment in general tend to give him a one-sided perspective on the world and on himself; he meets with too many failures and early is impressed with his own weakness and the futility of trying; his parents bemoan their fate and habitually point to the dark side of everything. Having become unduly impressed with his own weakness and having early taken over the belief of his parents that life holds nothing worthwhile for him, he frequently becomes anxious, fearful, and depressed. Upon reaching manhood he has an unfortunate love affair and goes into a state of prolonged depression. Now we may either legitimately conceive of two such cases or else we must believe that

environment has nothing to do with the shaping of the individual's sentiments and attitudes and outlook on life, which obviously would be absurd and is not supported by a single fact. Now the question is, can we legitimately say that B's manic-depressive psychosis was due to heredity? Only if we overlook all the environmental factors which were instrumental in shaping his development. And at the same time we must also overlook all the environmental factors which played a part in A's particular trend of development. In other words, we can say that B's psychosis was the result of heredity only if we make an implicit assumption that every individual grows up in the same, not general but specific, type of environment. In that case we should have to say that A's normality was the result of heredity; in short, that everything is a matter of heredity. On the other hand could we say that B's psychosis was entirely the result of environmental factors? Obviously not without overlooking the hereditary factors. We believe that we must always look upon any functional mental disorder, in the light of our present knowledge, as the result of an interplay of hereditary and environmental factors. If one or the other of these two sets of factors is to be ignored, we think it can more wisely be the former.<sup>10</sup>

<sup>10</sup> It appears to the writer that much of the confusion and controversy concerning the significance of environmental factors versus the significance of hereditary factors in the genesis of mental disorders arises largely from a general tendency to pay too little attention to the less obvious aspects of the individual's environment. We are too prone in general to think of environment in purely objective terms. A given environment may be one thing to one individual and something entirely different to another individual—a fact to which the layman does far greater justice than does many a psychologist. To the New Yorker, born and raised here, New York may mean little more than endless rows of office buildings and apartment houses, a monotonous humdrum of noise and activity. To the Texan who is seeing New York for the first time the office buildings may appear as towering monuments to man's power and industry, the noise and activity the pulse of a great metropolis throbbing with life. The individual and his environment are not two distinct entities which may be isolated and studied apart; it takes the two to complete the picture, and the one

A second theory endeavors to account for manic-depressive psychosis, as well as all other functional disorders, in terms of endocrinal disturbances. And along with this theory we might put all others which make of organic lesions explanations *per se* of mental reactions. Such theories would include among others Meynert's view that manic-depressive psychosis is a vasomotor disorder resulting in anemia or hyperemia of the brain, the view held by Cotton that it is due to poisoning of the body from focal infections, and the theory that it is a result of catabolic clogging. We may dispose of all such theories with a few remarks. In the first place the reader should not assume that when we speak of functional disorders we are denying the existence of any organic basis for them. We have repeatedly said that we postulate a physical basis for all mental reactions; but mental reactions cannot be adequately explained and understood, at least in the present state of our knowledge of the physiology and chemistry of the human individual, in terms of physical changes. A single example will serve to illustrate our meaning at this point. It is an established fact that in paresis (a toxic, *i.e.*

must always be studied in relation to the other. Given an abnormal reaction in a certain individual, we can understand it, not by means of postulating "bad heredity" or discovering insanity in a grandfather, but only by tracing the genesis of the reaction back through the individual's sequence of experiences. To one individual a closed room is little else than a closed room; to a second individual a closed room is a definitely fear-exciting situation, something which throws him into a state of terror. We are able adequately to understand his abnormal reaction only when we have traced it back to some earlier situation in which strong fear was aroused in connection with a closed room or something in some way analogous to it. And most of us would be strongly inclined to believe that had the first individual grown up in exactly the same environment and then been subjected to the same situation at the proper time he too would now be afraid of a closed room. Certainly there is an hereditary basis in an ultimate sense for the reaction, but before we can properly evaluate the significance of heredity in any given case it is necessary first to know the environmental background in detail. Many adults will even become depressed or more or less excited if placed around individuals in whom such reactions are manifest. How much more likely is the child to develop sentiments and attitudes which will condition depressive or manic reactions if he grows up around parents who habitually react in such ways!

organic psychosis) there is a general lesion of the cerebral cortex as a result of the life processes of the syphilitic germ which is always present. Now the cortical lesion is ample to account for the fact that there is a profound disturbance in the mental reactions of the paretic; but it does not account for the nature of these disturbances. The paretic very frequently believes himself to be a very important person, immensely wealthy, powerful, the possessor of many wives, hundreds of children, etc. The lesion does not account for these facts, it does not enable us to understand them as natural and inevitable consequences. They do have some meaning for us, however, once we relate them to the individual's past desires, hopes, ambitions, etc. We may be able to see in them the imaginary realization of life-long dreams. In short, from a psychological point of view they have a certain significance, from a purely physical point of view they have little or no significance. Hence with respect to what we might term these "organic theories" of manic-depressive psychosis, let us admit that organic disturbances may and perhaps do play a very essential part, but to say that a glandular disturbance or malnutrition or a focal infection *explains* adequately the complex system of abnormal reactions which we call manic-depressive psychosis is entirely too much like saying that the existence of the atmosphere explains or accounts for the aviator's flight.

A third and last theory of manic-depressive psychosis to be given is offered by McDougall.<sup>11</sup> He first endeavors to show that the disorder may be properly described in all its fundamental aspects in terms of the manifestations of the two innate dispositions ("instincts"), self-assertion and self-submission. Thus in the manic phase the behavior is clearly of the self-assertive type, in the depressed phase

<sup>11</sup> *Op. cit.*, Chap. XXII.

it is of the self-submissive type. Hence the disorder may theoretically be a matter of unbalance between these two dispositions as a result of environmental influences which have tended persistently to arouse one or the other,—such as a long run of “hard luck,” trouble, disappointments, etc.—or as a result of organic disturbances, or, finally, as a result of an improper integration of these two dispositions within the sentiment of self-regard.

Since we have gone to some extent in attempting to show that this psychosis is chiefly, and typically, characterized by an alternation of two affective states and correlative trends of activity, and since these affective states and forms of activity are essentially what we have described throughout this book as being of the self-assertive and self-submissive types, we may profitably inquire into the tenability of this theory which McDougall advances. To begin with, we shall discount the matter of unfavorable environmental influences immediately preceding the appearance of the psychosis and likewise the matter of organic disturbances, except as precipitating or exciting factors, and look for the real causative factors within the mental integration of the individual. What sort of faulty integration of the personality might then lead to manic-depressive reactions under the stress of unfavorable conditions (environmental or organic), and what general type of early environment might conceivably lead to such faulty integration? In the absence of any carefully collected data bearing on the question, our answer must be admittedly largely speculative. We have said that belonging to the individual's inherent constitution are certain innate dispositions, the dynamic aspects of which tend to express themselves in more or less characteristic forms of activity. Now if the early environment is such as to keep one of these dispositions from being aroused to a normal

extent due to the persistent and strong arousal of another disposition which is antagonistic to it, obviously the first cannot become properly integrated with the main mental organization. The result will be that when the suppressed disposition is aroused it will tend to usurp the entire mechanisms of the individual, to manifest itself in isolation from the main mental system. Two innate dispositions become integrated—just as two motor reactions become coördinated—only if they are simultaneously aroused or exercised. Thus, for example, the parents who go to great trouble not to arouse their child's anger invariably find that the child has a "terrible temper." Or, again, we all know of the person who seldom gets angry but who is "perfectly terrible" when he does. Writers of fiction have dealt at great length with the helplessness of the naïve country girl whose self-esteem and self-assertive tendency (desire for self-display) have suddenly been strongly aroused—perhaps for the first time—by the flattering remarks of the theatrical producer (alias traveling salesman). And we all know of the tendency in the child, who is continuously bullied by his playmates, to go to the other extreme and himself become an even worse bully once he finds himself around children who are his inferiors. Now let us apply these facts to an interpretation of manic-depressive psychosis, assuming it to be primarily characterized by a lack of balance or integration of the dispositions of self-submission and self-assertion. These two dispositions, it must be remembered, are truly antagonistic in the sense that the strong arousal of one inhibits the other; to exist together they must strike a compromise, so to speak. In other words, each tends to modify the other. Now if one has been more or less constantly aroused to the exclusion of the other throughout the individual's development, we may have an individual who is characterized

either by an unusual tendency to put himself forward on every occasion or else by a tendency to withdraw into the background always, depending on which disposition has been emphasized. Or we may have an individual who characteristically reacts with submission to certain aspects of his environment (his too domineering parents, for instance) and with extreme self-assertion toward other aspects (his younger brothers and sisters, for instance). Thus he grows up with a dual, instead of a unified, perspective on his environment; he makes a rough distinction, separating all situations into two general classes—those in which he recognizes himself as being superior and to which he reacts with considerable self-assertiveness, and those in which he recognizes himself as being inferior and to which he reacts with submission. Now this individual who has never learned to give and take in a real sense may go a long way in concealing this split or lack of integration within his make-up. In many situations he ostensibly submits whereas in reality he is rebelling, and vice versa. How often does an individual comply and acquiesce with apparent good grace to the statements, arguments, etc., of another only to explode with “What an utter ass!” the moment the other’s back is turned. Recently a college girl who certainly has no great claim to marked distinction frankly told the writer that she considered herself decidedly superior to the other students. Yet one never would have guessed this attitude in her from her gracious manner. So the pre-manic-depressive type is, we believe, the person who has not learned to compromise with life-situations; to whom all individuals are quite definitely either superior, inferior, or indifferent. No one person is adequate for arousing in him to a reasonable degree both the self-assertive and the self-submissive dispositions; only the one or the other or neither is aroused by a given situation.

Then, being poorly equipped for making those niceties of adjustment which social and competitive situations demand, the individual fails more and more to conceal his true tendencies and emotions, and, following an unfortunate love affair, illness, business reverses, or some other strongly disturbing experience, the split in his mental organization becomes complete and he goes, usually first, into a state of depression. Hence in manic-depressive psychosis we believe we are dealing fundamentally with a defective mental integration which is the result of improper conditioning in the early life of the individual.

The following case cited by McDougall <sup>12</sup> may help the reader to understand what we have been saying.

CASE 27. O'B. was a man of thirty years, of Irish descent; his family was Roman Catholic and of the lower middle class. He had intellectual capacity and ambitions, and was studying law. As he boastfully remarked, he was the only member of his family, and perhaps the first of his name, to aspire to intellectual distinction. His father was a man of violent temper who, though not devout, insisted upon the forms of the Roman Church. At an early age the son began to rebel against the prescriptions of the family's religion, but continued to conform outwardly under the pressure of his father's authority. In the middle twenties he married a girl of a Protestant family, in defiance of his father. The girl was a typically modern, emancipated, and up-to-date young person. She refused to have any children, and regarded her husband as existing chiefly in order to supply her with the means to "have a good time," i.e. to continue the round of gaiety to which she had been accustomed before marriage. She habitually exposed as much of her person as the law would permit, and regarded young men as necessary means to "a good time." Further, she was entirely sceptical in all things, especially in respect of all moral and religious teachings; and she made fun of those religious beliefs which her husband continued to harbour, although he had ceased to be a practising Catholic. Here, then, was a train of circumstances which, if the hypothesis I am putting

<sup>12</sup> *Op. cit.*, pp. 364-365.

forward is sound, might be expected to lead to disorder of the manic-depressive type. Manic-depressive disorder of a mild type set in some few years after marriage, and became gradually accentuated. Up to the time when he came into my hands, he had escaped confinement in a hospital, except for one short period. The phases of exaltation and depression were of brief duration, and commonly were separated by weeks or months of normal or nearly normal mentality.

In the depressed phases he was full of fear, whose objects were largely determined by his religious training; at these times he believed in hell-fire and in the devil; and he felt that he was surrounded by spirits powerful to aid or to hurt; he looked upon himself as a miserable sinner who could not hope to escape the fate proper to a heretic and an apostate. His wife's sceptical pleasantries and jeers, at the expense of religion in general and of Roman Catholicism in particular, were terrible to him; and, when his fears were revealed to her, she lashed him with scorn and contempt before which he quailed miserably. Such gibes failed to stimulate him to any self-assertive reaction. What right had he, an ignorant creature of humble origin, to question the immense and ancient authority of the Church? What the Church taught was true; and there was no hope of salvation for him; he had had every chance to be a good Christian, and had wilfully chosen the path of evil. In his exalted phases he was entirely sceptical of all religious teaching. His self-assertion largely took the form of seeking controversies with high authorities on moral and religious questions. He sought and obtained interviews with priests and distinguished theologians and professors. It was in this way that he came across my path; he thought my reputation sufficiently high to make me a foeman worthy of his steel; and he sought me out in order to argue sceptically, and with the utmost dogmatism and self-confidence, against all religious and moral beliefs. At these times his wife's frivolous conduct gave rise to a furious jealousy that was completely lacking in the depressed phases.

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## CHAPTER XIII

### THE PSYCHOSES (*Cont.*)

#### [PARANOIA AND PARANOID CONDITIONS]

**Frequency and Nature of Paranoia.** Paranoia and paranoid conditions constitute but a small percentage of mental hospital admissions. True paranoia itself, with which we shall for the most part be concerned here, perhaps comprises not more than 2 per cent of first admissions.<sup>1</sup> However, despite its relative infrequency, the phenomena which it presents are of singular interest and significance to the student of abnormal psychology, inasmuch as they not only present one of the clearest-cut types of mental abnormality but shed considerable light upon normal mental processes. Unlike the mental disorders which we have discussed so far, the nonadjustive or abnormal reaction-picture of paranoia can be reduced to a single feature, namely, a *systematized delusion*.

A delusion, of which there are various kinds, may be simply defined as a false belief. Since undoubtedly we all have certain false beliefs, it follows that we all have delusions. So it becomes necessary again to draw some more or less arbitrary distinction between the normal and the abnormal. Stoddart defines an "insane" delusion as "a judgment which cannot be accepted by the people of the same class, education, race, and period of life as the person who expresses it."<sup>2</sup> To illustrate: The belief on the part of

<sup>1</sup> Strecker and Ebaugh, *Clinical Psychiatry*, give 1.9 per cent. See p. 269. Blakiston.

<sup>2</sup> Stoddart, W. H. B., *Mind and Its Disorders*, 5th. ed., p. 165. Blakiston.

an astronomer that the earth is flat would be considered an abnormal delusion. The same belief held by a member of the hill-folk of Kentucky would not be considered an abnormal delusion. Again: If an intelligent college student believes that by repeating "rit-tat-tat" ten times he can cure a case of scarlet fever, we should characterize his belief as an abnormal delusion, but the same belief in an aborigine of Australia would not be considered abnormal. In short, if a belief is obviously out of keeping with the intellectual background of the individual who entertains it, it is considered abnormal. It naturally would be extremely difficult to draw any hard and fast distinction between normal and abnormal delusions; and fortunately we need not concern ourselves here with such a problem.

**Some Classifications of Delusions.** Delusions can be, and have been, classified from various angles. A delusion or false belief may pertain to one's own body or mind or to the objective world. In the latter case the delusion is sometimes called *allopsychic*; an example would be the belief, on the part of an educated person, in "perpetual motion." Where the belief is primarily related to the person's own body it is spoken of as *somatopsychic*. An example of this type of delusion is found in the patient who believes she has no heart, lungs, or stomach, or who believes she has no body at all. If the delusion refers to the person's own mind or personality, as in the case of the person who believes he is the greatest inventor who ever lived, it is called *autopsychic*. Again we may classify delusions, with respect to their permanency, as *permanent* and *transitory*. Some delusions are very transitory and unstable, while others last for years, or as long as the patient lives.

A third way of classifying delusions, and one which is of greater significance to us at the present time, is with

respect to their coherency; from this point of view we have two kinds of delusion, *systematized* and *unsystematized*. In the case of the systematized delusion there is not only the nuclear or central belief or conviction; all other beliefs of the patient are in harmony with this central "idea." Thus if such a patient has the delusion that certain individuals are plotting his ruin, then everything that occurs in his environment is harmonized with this basic conviction: the hospital is a jail, the doctors and attendants are guards in the employ of his persecutors, the medicine which he is offered is not medicine at all but poison, the whispered conversation between nurse and doctor is directed against him, etc. In many instances of highly systematized delusions, only a thorough and careful study of the patient's history will enable the observer to say whether the patient's statements are true or false. If the major premise, the basic belief, is granted, the rest often logically follows. In the case of the unsystematized delusion there is a lack of coherency, relevancy, between the patient's different statements. Such a patient may believe that he is God and at the same time that he is being retained in a mental hospital against his wishes. He does not have logical arguments to support his basic contention. Hence he may merely reiterate the statement that he knows he is God, failing to fit his present surroundings and experiences into his belief.

Finally we may classify delusions with respect to the nature of the affect and of the urge which belongs to, or accompanies, the belief. According to McDougall, when such a classification is made, all delusions fall into two great classes: *delusions of desire* and *delusions of aversion*.<sup>3</sup> Perhaps all delusions of true paranoia can be classed either as *delusions of persecution* or as *delusions of grandeur* or as

<sup>3</sup> *Op. cit.*, pp. 333-334.

*both*. This will suffice for the various manners in which delusions may be classified; various points implicit in what we have said regarding classification will be brought out in the course of the chapter.

Now the reader must bear in mind that the mental disorder with which we are concerned in this chapter is characterized solely by systematized delusions, usually of a very permanent nature. Delusions are found in various mental disorders besides paranoia, but except for paranoia the delusions are accompanied either by other mental symptoms or by organic disturbances of a pronounced character. Moreover, the delusions found in other mental disorders are not of the highly systematized and permanent character that is peculiar to the delusions of paranoia. It should be stated, however, that authorities are not all agreed that the mental disorder commonly called "paranoia" is a distinct disorder, some holding that it is one of the dementia præcox group of psychoses. From a psychological point of view, nevertheless, it is sufficiently distinct from every other mental disorder to permit of its isolation from the rest for purposes of study.

A number of different forms of paranoia have been distinguished, some of which we shall briefly mention.

**Forms of Paranoia.** (1) *Persecutory Paranoia*. This is perhaps the most common form—at least so far as cases in mental hospitals are concerned—and is of course characterized by delusions of persecution. This type of patient believes with the utmost sincerity that the world is against him. Or, in a given case, he may believe that only certain individuals, or certain institutions or organizations, are set upon his ultimate downfall. In keeping with this belief he is more than likely to misinterpret many of the events of his everyday life, misconstruing the remarks of

others, seeing evil intent in the most innocent and insignificant act on the part of doctor or attendant. Provided it is possible to gain the confidence of such a patient, one may usually listen to his long, coherent, and very convincing story, telling exactly who brought about his commitment to the hospital, why they did it, and precisely how they exert their influence to keep him there. Perhaps a political rival or a rival in love wishes to bring about his moral and social downfall or even his death. He will perhaps tell you that the superintendent of the hospital as well as certain of the doctors and attendants are in the employ of this party and that they are attempting to poison him, that they have spies watching his every move, that his letters are being confiscated by the superintendent, and so on indefinitely. The attitude which patients of this type take toward their supposed persecutors varies considerably. One patient will remain more or less passive, complaining a great deal but accepting his persecutions and sufferings as so many misfortunes, while another patient will finally reach the point of open and active rebellion against his supposed persecutors. When the latter occurs, we perhaps have the most dangerous type of patient to be found in the insane hospital. He may either attack his supposed persecutors with all the abandon and fury of an animal or—and this is perhaps the more usual thing—he may plot (and sometimes achieve) with the greatest cunning his liberty and vengeance.

The following case given by Bleuler<sup>4</sup> illustrates the extent to which a paranoiac may go once he decides to right the wrongs which he believes have been done him.

CASE 28. During the night from the third to the fourth of September, 1913, the Headmaster Wagner, thirty-nine years old, murdered his four children and his wife while they were sleeping; the

<sup>4</sup> *Text Book of Psychiatry*, pp. 516–517. Macmillan.

following night he set fire to several houses in another village where he had previously been a teacher, and was shooting at the male inhabitants, of whom he killed nine and seriously wounded eleven. Even as a boy he was easily insulted, ambitious, conceited. Later he had poetic plans for reforming the universe. His sexuality in respect to the animal impulse was strong, but he had a "disinclination" toward marriage and evidently no parental instinct, even though he loved his children in an ordinary human way.

His highly developed self-esteem had been deeply depressed by a futile struggle of many years against onanism. Later (1901), under the influence of alcohol, he had let himself be carried away to sodomy, and then had a dreadful feeling of sin with incessant fear of contempt and arrest, which soon brought about delusions of reference and the conviction that the inhabitants of the village knew of his crime and spoke about it.

His accusations against himself he transferred to his family; all "Wagners" should be exterminated; then his hatred extended to all mankind, above all to the inhabitants of his district who had treated him badly. He condemned himself doubly, in part as a man unworthy of this life, but in part as a genius whom he honored as at least equal to the greatest poets, but whom he also ranked as equal and superior to Nero, and, on the other hand, compared with Christ. Transferred in 1902 to another place, he enjoyed relative quiet for six or seven years without, however, ever ceasing to build up further his delusional system. But then, according to his opinion, the remarks and contempt continued there also. The result was the plan even then developed in every detail, to murder his family as much because of reasons of race-hygiene as from pity, and then set fire to the village where he was first employed, and destroy it with all its hypocritical inhabitants. The first necessity was the extermination, the "redemption" of his children; but the revenge against, and contempt for, the village occupied him no less. His wife he had to kill because of pity. For a person like him there are special laws. He had not only the right but the duty to do this. His plan was a "humanitarian matter." For four years he postponed the execution of the bitter task. But when he was later transferred to a third locality and there felt himself the centre of bar-room gossip, he executed his plan systematically. In his feelings, as in his self-estimation, he was completely ambivalent: he could not witness the killing of a chicken, did not like to see blood generally. In the insane asylum also he

was so soft during the visits of relatives that he denied them to himself, and with all this, he had made and also executed the bloodiest plans.

In the case just given, delusions of grandeur as well as delusions of persecution are clearly indicated. It is Bleuler's opinion that these two types of delusion always go together. He says: "There is probably no paranoiac (and paranoia-like) delusion of greatness without delusions of persecution, and no delusion of persecution without ideas of greatness or at least aspiration to greatness, and the difference between the two forms becomes relative. . . . The 'exalted feeling of self,' which is ascribed to paranoiacs of various kinds is, therefore, probably a necessary condition for the origin of the disease. But I should like to add that, according to everything I know, this feeling must be opposed by a feeling of insufficiency, probably repressed, before the paranoia can originate. Whoever collapses without this *inner* conflict has no occasion for a delusion of persecution, and also probably cannot produce the energy to separate himself from reality." <sup>5</sup>

(2) *Inventive Paranoia*. The individual believes himself to be a great inventor and besieges patent offices with his many inventions. One such individual presented to the Patent Office a specification for manufacturing gold from husks of corn. These individuals are not so frequently found in mental hospitals inasmuch as their delusions are not likely to bring them into sharp conflict with society. Occasionally, however, they are committed to mental hospitals as a result of complaints from members of their families or neighbors.

(3) *Litigious Paranoia*. This often follows upon a lawsuit or perhaps upon some very minor misunderstanding and unsatisfactory adjustment of grievances. The in-

<sup>5</sup> *Ibid.*, p. 531.

dividual seeks legal redress, going, if he has the money, from one court to another. He does not hesitate to forge documents and perjure himself without limit in order to win his ends. Failing to obtain satisfaction from the courts he may have recourse to plots of revenge, even to murder. Needless to say such an individual believes himself incapable of committing any wrong and therefore is convinced that the other person is the offender.

(4) *Reformatory Paranoia*. These individuals usually see the world in danger of economic or moral bankruptcy, and themselves as the indispensable saviors of the race. Undoubtedly many, perhaps most, of our street-corner orators, fanatical prohibitionists, and others of our more ardent missionary group belong to this class of paranoid individuals. The reader must not suppose that since the percentage of paranoiacs in mental hospitals is relatively small this particular type of mental disorder is correspondingly infrequent outside the mental hospital. In fact, the reverse is perhaps nearer the truth. An individual is committed to a mental hospital usually either because he is unable to take care of himself on account of a mental disturbance or because he is considered a menace to society. But for some peculiar reason fanatical missionaries and "rabid" reformers are not considered a menace to society and consequently are usually allowed their freedom.

(5) *Religious Paranoia*. This does not differ greatly from the type which we have just mentioned. The religious paranoiac usually believes himself to have been chosen by God for the express task of converting the world to his own particular religious creed. The creed is usually somewhat fantastic and not infrequently a bit sensualistic. Recently a man in a western state, a faculty member in a university, stoutly declared that he had been commanded by God to institute a "religious" practice which he char-

acterized as the "Sacrifice of Wives." This new doctrine, which was quite simple and might well have occurred to some much less educated person, merely commanded that all husbands who became members of this new religion should exchange wives at about the time when most people go to bed. Needless to say the creed found quite a number of sincere believers and the group, upon meeting with adverse criticism, moved to another part of the state. It is quite safe to say that many of the leaders and would-be leaders of religious creeds in the past were and in the present are religious paranoiacs.

(6) *Erotic Paranoia*. The individual believes that a member of the opposite sex is very much in love with him, and this often despite the fact that the person may be utterly oblivious of the patient's existence. One such paranoiac wrote repeatedly to a young woman whom he had never met and who, incidentally, was considerably above him in social standing. The fact that his letters were not returned was taken to mean that his proposals were being looked upon with favor, and the fact that he received no answers was interpreted as indicating that the young woman's family was opposed to her marrying him. Even being turned away from the house when he called to make a proposal of marriage did not in the least alter his convictions. Finally, upon complaint of the woman, or her family, the man was arrested and later taken to a mental hospital. It is of some significance that the erotic element may be scarcely if at all present in this form of paranoia; and likewise of significance is the fact that the person whom the paranoiac believes to be enamored of him is almost invariably someone who is considerably above him socially and economically. This seems to be more true however with respect to male than with respect to female paranoiacs.

(7) *Hypochondriacal Paranoia*. In this form of paranoia the patient believes that there is something seriously wrong with his body. He may believe that he has cancer of the stomach, or that he has a missing lung, or that his bones are decaying, or in fact anything whatever relating to organic disorders. Usually he has gone through a long period of complaining, consulting doctors, and taking patent medicines before he is brought to the hospital. He blames the doctors for not being able to find anything physically wrong with him, accuses them of having given him the wrong medicine, and may even institute legal action or endeavor to do them some bodily injury. Or the patient may take a more passive attitude toward his "misfortunes," finally believing that his last day has arrived, that no power on earth can save him; and he may continue to harbor such a belief year after year.

What we have said will suffice for the different forms of paranoia, that is, for the different trends which paranoid delusions may take. Merely mentioning these peculiar phenomena, however, does not enable us to understand them, to harmonize them in any way with our own experience. An individual may believe with the utmost sincerity that he is God, or the King of England, or Henry Ford, or that someone whom he has never met is in love with him, or that everyone is laughing at him, making fun of him, persecuting him, or that he can make gold out of corn husks, and yet except for his delusion be in all respects mentally sound. But how, the reader may wish to know, can an individual who in all other respects is quite sane actually believe in something which is obviously contradicted by every objective fact in his environment both past and present? By way of answering this question we can only offer certain suggestions; and in making these suggestions we must necessarily consider briefly the psychology of belief.

**The Origin and Nature of Beliefs.** Now we are inclined to suppose that our beliefs are merely the resultants of our cognitive processes, that is, of our perceiving and thinking. In other words we usually take for granted that we believe what we perceive and that we perceive things essentially as they are. But a moment's reflection will convince us that this is not at all the case with many of our beliefs, but rather that many of them are the result of both cognitive factors and affective and conative factors. In short, what we speak of as a belief is typically the cognitive aspect of a mental disposition, an attitude or a sentiment. And we may arbitrarily separate all beliefs into three great classes: (*a*) those toward which we are indifferent, (*b*) those which are more or less unpleasant or disagreeable, and (*c*) those which are more or less pleasant or agreeable. Let us briefly analyze examples of these arbitrary classes and note the different factors which enter into the formation of a belief.

To begin with, we must admit that it is very questionable whether any of us entertain beliefs toward which we are wholly indifferent; if we do it is then likely that at the time of the formation of the belief we were not indifferent toward it, that is, toward the fact or event to which the belief relates. Nevertheless we may distinguish a class of beliefs which lie between those that on the one hand are associated with feelings of aversion or unpleasantness and those that on the other hand are associated with feelings of desire and pleasantness. We may assume as belonging to this intermediate class such a belief as that there are forty-eight states in the United States. One may believe this and at the same time be, so far as he can tell, quite indifferent to the matter. Hence, in this case, only intellectual processes appear to be involved; it is simply a fact which he knows but about which he is not con-

cerned.<sup>6</sup> But at the time when he was learning the number of states in the Union, when he was being called upon in school to give this information, was he indifferent toward the fact? One has only to observe children to find evidence aplenty that all such presentations of facts elicit an affective response (interest, wonder). And it seems highly probable that if we were carefully to trace the genesis of any indifferent belief of the adult we should find that at the time when the belief was being acquired, the discovery or presentation of the facts with which the belief is concerned did arouse a definite affective tone. We all know of the pleasure associated with the acquisition of knowledge (new beliefs) and of the often pleasurable anticipation with which we begin a new line of inquiry. Most of our beliefs belong to this intermediate class and perhaps have involved primarily only the *innate disposition of curiosity*, the desire to know, to discover and understand the facts of the world in which we live. According to McDougall it is only when the cognitive processes of perceiving, judging, and believing are motivated by the impulse of curiosity that the judgments and beliefs are likely to escape distortion. Thus: "It is, I think, literally true that one motive only can determine judgment and belief without to some extent biasing, or tending to disturb, the intellectual operation of judging, namely, the impulse of curiosity, the sheer desire to know, to become better acquainted with the facts."<sup>7</sup> According to this we should expect our more "indifferent" beliefs to be our truer, less distorted, beliefs.

It is when we turn to either of the other classes of belief that we mentioned that we are able to see very clearly the

<sup>6</sup> The reader will observe that we make no distinction between "believing" and "knowing." Psychologically no such distinction can be made. We can distinguish only different degrees of "certainty" or "conviction," *i.e.* different degrees of believing.

<sup>7</sup> *Op. cit.*, p. 333.

influence which our impulsive and affective processes exert upon our judgments and beliefs. Let us consider first those beliefs which are more or less disagreeable to us. First of all we shall observe that all such beliefs have some definite personal significance to the believer—a belief concerning objective facts which are entirely impersonal in their relation to the believer is never disagreeable. And secondly, we shall observe that it is always more difficult to believe in the disagreeable or unpleasant than in the agreeable or pleasant. The student who believes he has made a “C” in an examination learns that he made an “F.” He cannot believe it, and asks if he may see his paper. After going over the paper and discovering no arithmetical error in the computation of his grade, he slowly walks away, still only half convinced that he really made an “F” instead of a “C.” A second student believes he has made a “C” and asks for his mark. He is told that he made an “A.” He may be a bit surprised but he has no difficulty in actually believing that he made an “A.” Neither of these students is shamming; it is simply easier to believe that which we want to believe than it is to believe that which we do not want to believe.

“A man convinced against his will  
Is of the same opinion still.”

That such should be true is not surprising if we bear in mind that to believe is to accept. But after all how is it possible for one to disbelieve, merely because it would be unpleasant to believe, anything which has all the obvious signs of actuality? Certainly it does not seem that anyone would be able to disbelieve simply because he would like to do so. We shall consider this question again as soon as we have considered briefly the class of agreeable beliefs.

Fortunately many of our beliefs are very agreeable to

us; we often enjoy believing as we do. In fact it is so easy to believe what we wish to that we all undoubtedly have delusions belonging to this class of beliefs. The writer is inclined to the opinion that a prototype of all such beliefs is to be found, to a varying extent, in each and every one of us; namely, the fact of believing that we are in some (perhaps undemonstrable) way just a little superior to everyone else. If there is some such universal belief, whence does it spring? Well, to begin with, each individual recognizes the fact that he is different from everyone else. Now the one mark of distinction after all is "difference," and we all like distinction. Hence it is an easy step from the recognition of a difference between one's self and everyone else to that of a belief in one's superiority. The difference recognized, or rather the recognition of the fact that there is a difference, is interpreted as a mark of distinction, and this means superiority. It is highly probable that another factor lends itself to this belief. Each of us knows that there is much about himself which is not apparent to the other person, that he has thoughts and feelings (particularly feelings) that he never talks about, which, in fact, he may be unable to put into words. Along with this recognition that there are certain aspects of his personality which he does not reveal to others is the assumption that others are what they appear to be, that they reveal themselves in their entirety. Perhaps this is in part the basis of that very common belief that we *know* others but that they do not *know* us; and this belief, of course, tends to give us a feeling of distinction. To many individuals it is an insult to tell them that they are as transparent as glass, that *we* can read them like a book. Everyone likes to believe that he has something over and above what others think he is.

Quite similar to those common beliefs which we have

been discussing are those of the mother in regard to her children. Certainly many mothers believe that their children are the smartest, the best mannered, the most promising children in the neighborhood; and the amount of evidence necessary to convince a mother that a child of hers is inferior to others or that he has committed some misdemeanor is sometimes almost unbelievable. We might here allude to the fact that many mothers who lost sons during the war still believe that their sons are alive. Many fathers believe that their sons have inherited the genius which unfavorable circumstances have always kept them from revealing, and in keeping with this belief they spend much time and money endeavoring to uncover those latent potentialities for greatness which they *know* their sons must possess. All in all we can say that the satisfaction which we gain from believing as we do is self-evident in many of our beliefs. But we have yet to decide how, and to what extent, the desire to believe a thing may determine one's believing it.

It is a universal fact of everyday life that strong desire or strong aversion or any strong emotion may distort perception, that is, lead to misperception. The individual who is dying of thirst in the desert *sees* a pool of water and rushes forward to quench his thirst; the jealous husband perceives in the most casual glance of the other man a "knowing look" at his wife; the embarrassed student sees in the smiles around him not sympathy but derision. The earnest lover who declares his sweetheart to be the most beautiful woman in the world often amuses his listener. But to him (the lover) the girl's squint is a charming little gesture, her freckles are not freckles at all but delicate little marks of distinction to be counted and kissed, her hooked nose denotes pride and strength of character and he would not for the world have it any other way, her

small receding chin not only possesses a delicacy of its own but lends a softness to the general contour of her face—and yet the lover is sincere when he declares her beautiful. All this is strictly in keeping with our statements in the second chapter to the effect that an emotion acts in part as a mechanism, tending to condition the other mental processes in such manner as will be in harmony with it. This results in the perceiving of certain facts and the overlooking of others and furthermore in the “coloring” or distortion of the facts perceived. Distorted perception inevitably leads to distorted judgments and beliefs. Hence we see that strong desire and emotions may largely determine beliefs, due to their influence upon the perceptive processes. To illustrate: A student recently told the writer that he did not believe his parents were really his own. Since he could offer no logical evidence to support his belief (or disbelief), it was naturally suspected that the student for some reason or other did not want to believe his parents were really his. A little tactful questioning clearly brought out the fact that he considers his parents definitely inferior to himself, that because they are uncouth and uneducated he is ashamed of them and, in short, that he would like to believe (to know) that he hails from nobler stock. Now if we start out with the assumption of what appears to be a rather obvious fact, namely, that he desires to disbelieve that he is the son of such a lowly couple, then it is clear when we trace the genesis of his belief that he has greatly overemphasized the importance of certain insignificant facts and at the same time overlooked a thousand and one other perfectly obvious but contradictory facts. Thus he recalls that he was taken to Russia when he was four or five and he is sure that this had some definite significance of which he has never learned. His parents often talk in a subdued tone and he

is sure this has something to do with him and the question of his true parentage. He recalls a rather striking woman who used to call at his home when he was a child and he thinks this may have been his real mother. Such are the facts which he says lead him to believe as he does. On the other hand he overlooks such facts as that there are other children both older and younger than himself and that it is highly unlikely, since his parents are quite poor, that they would have burdened themselves with another child which was not their own; the fact that his brothers and sisters are not particularly different from himself either in physical appearance or ability; the fact that his parents have never shown any partiality; the fact that no one has ever hinted that he was not the child of the couple who claim him, etc. By directly influencing perception is one way, then, in which desire and emotions may lead to false beliefs.

Aside from this there is another way in which affective and conative factors may be largely instrumental in determining beliefs, the mechanisms of which, however, are not well known. We are very prone to accept as true the statements of those whom we recognize as our superiors. Thus the child accepts its mother's statement that a bad man will get it if it is not good; the naïve adult accepts the quack's statement that he can read minds and tell fortunes; we are all inclined to accept the astronomer's statement that it is so many miles from here to the sun. In all such cases we appear to be dealing merely with an aspect of, or the outcome of, an attitude or sentiment which is already established. One cannot recognize another as being his superior without really accepting him as such; and in doing this he has likewise implicitly accepted, at least to a considerable extent, the other's statements and actions—even before they are made.

Hence we see that strong desire and emotion may be instrumental in the development of false beliefs, in accordance with a mechanism which has long been known to psychology. It may be simply stated thus: If the individual's first reaction to the situation is of an emotional nature, this emotional reaction (emotional state) will tend to influence all subsequent intellectual reactions of a perceptive nature and these in turn will give rise to faulty thinking and inferences (beliefs). In terms of this mechanism and the one mentioned in the preceding paragraph we are able to account to a considerable extent for many delusions, particularly delusions of desire. But in many cases our interpretation would be quite unsatisfactory if simplified to this extent, and consequently it becomes necessary to consider other factors, particularly with respect to delusions of aversion. First of all it is necessary to take into consideration the level of intelligence and the educational background of the deluded person. For instance, the belief that someone in another city or another part of the same city is sending electricity through his body at all hours would certainly strike us as being more absurd and illogical if held by an intelligent and educated person than if held by a dullard. The belief that one is God is certainly more absurd than the belief that one is being persecuted by others; the belief that one has no stomach is more absurd than the belief that one's parents are not really his own.

Thus, as we said in the early part of the chapter, our chief criterion for deciding whether a false belief shall be considered abnormal is the intelligence and educational background of the individual who entertains the belief. Conceptually at least, the possibility of a given individual's developing a delusion depends upon the relationship existing between two sets of variables—the strength and

preciseness of the habits of perception (attitudes) which he has developed and the strength and persistency of impulsive and emotional trends which are inclined to interfere with, or distort, those habits. It is conceivably possible for one to believe anything whatever, provided the desire to believe it is sufficiently strong. However, the writer is of the opinion that there is a fairly high correlation between what we might speak of as the plausibility of the delusion and the intelligence and educational background of the patient.

There are still other factors to be considered. It seems undoubtedly true, in accordance with the opinions of many writers, that delusions are always preceded by mental conflicts and that in many cases there are varying degrees of repression of one factor in the conflict. Conflict and repression come to light most clearly, perhaps, in cases of delusions of aversion, the basic form of which is the delusion of persecution. It perhaps does not strike us as being so strange that one should finally come to believe that his parents are not his own when a strong desire to believe this is present, but it is more difficult to understand the belief on the part of another individual that he is being persecuted. Perhaps every case of persecutory delusion begins with self-persecution or self-condemnation because of some act or desire which is incompatible with the self-regarding sentiment of the individual.

Repression may then occur with the result that the individual is no longer aware of having committed the objectionable act or of having entertained the objectionable desire. Conceivably the repression may be only partially successful, leaving the individual with a feeling of self-condemnation. This feeling is "projected" in the same sense that we often blame others for our failures. It then appears to the individual that others are condemning him. He is now on the alert for any sign of this

in those around him, and of course he soon finds it. He begins to misinterpret the most insignificant remarks and actions of others, thinking they are directed at him. More and more of his time and energy is taken up with seeking hidden and derogatory meanings in the remarks and acts of others; his delusion expands and soon he may believe everyone in his place of business or even the whole world is against him, plotting his ruin. But inasmuch as he is receiving so much attention and so many are going out of their way to do him harm, he naturally comes to feel that he is a very important person, and then along with his delusions of persecution there develop delusions of grandeur. Chancing to read in a newspaper of someone of his name leaving a large estate he may readily believe that he is the rightful heir and that his persecutions, commitment in the hospital, etc., have been planned by unscrupulous persons who wish to obtain his fortune.<sup>8</sup>

**The Freudian Interpretation of Paranoia.** According to Freud, paranoia is always the result of a repressed homosexual trend. His theory has met with some acceptance among psychiatrists and, in the writer's opinion, does seem to fit quite well certain cases but is not applicable to all. The brief sketch of the Freudian interpretation which follows is cited after Stoddart.<sup>9</sup>

The paranoiac always starts with the unconscious premise "I love the man" (for convenience I am assuming the patient to be a male).

*Persecuted paranoia.*—"I love the man"—an intolerable idea, therefore becoming repressed and replaced in consciousness by "I do not love him; I hate him." This by projection becomes "He hates me," "I am persecuted by him."

<sup>8</sup> The reader should refer back to the case cited (Case 28), and there note how delusions of persecution followed upon mental conflict, feelings of shame, self-reproach, etc.

<sup>9</sup> *Op. cit.*, pp. 312-313. Blakiston.

*Exalted paranoia.*—"I love him"—again an intolerable idea, therefore "I do not love him, I love myself." This by projection becomes "Everybody loves me," "I am a great person."

*Religious paranoia.*—"I love him" being intolerable, becomes "I love Him" (spelt with a capital H), meaning "I love God." This by projection becomes "God loves me," "I am the chosen one of God."

*Amorous paranoia.*—The intolerable "I love him" becomes "I do not love *him*, I love *her*." This by projection becomes "She loves me."

*Jealous paranoia.*—"I love him," as usual, is replaced by "I do not love him; she loves him."

*Hypochondriacal paranoia* is somewhat like exalted paranoia, "I love myself" becoming "I must take care of myself."

**Concluding Remarks.** From the preceding discussion the reader will observe that paranoia, like the other mental disorders which we have discussed so far, may be viewed as an attempt on the part of the individual to adapt himself to some difficult situation. The most outstanding processes and mechanisms involved are faulty perception and thinking, and memory, rationalization, projection, and transference of affect, and repression. It is the opinion of most writers that paranoia usually, if not always, develops in those individuals who are unduly suspicious of the motives of others. This personality trait together with some fact which is emotionally disturbing to the individual provides the basis and the starting point for the delusion. Again, as Morgan<sup>10</sup> points out, a delusion may be viewed as a defense reaction. The individual is endeavoring to defend himself not against his objective environment as he thinks but against something within himself, some tendency or character trait or past act which

<sup>10</sup> Morgan, J. J. B., *The Psychology of Abnormal People*, p. 172. Longmans, Green.

is disturbing to his peace of mind. Just as he believes others are persecuting him because of a feeling of shame or guilt, he may believe himself to be a great person as a means of defending himself against a sense of insignificance or incompetency.

Paranoia usually develops during the thirties although it may appear either earlier or later. It appears to be somewhat more frequent in men than in women, Kraepelin observing that 70 per cent of the cases known to him were men. It is the consensus of opinion that the condition is incurable, undoubtedly because of the extreme stability of deeply-rooted and complex mental dispositions—which, of course, a highly systematized delusion is—and because it is extremely difficult to get and retain the confidence of a paranoid patient, a condition which would be necessary to bring about any change in his beliefs.

A careful reading of the following case, quoted from Strecker and Ebaugh,<sup>11</sup> will help to impress upon the student some of the things which we have said.

CASE 29. Onset of present illness. In the early part of 1918, the patient complained that a certain minister was trying to poison her and to defame her character. Since that time, the patient has wandered from city to city to escape the minister. She has had numerous positions but said that she always lost them because Rev. Y. spread stories about her and tried to make her immoral. Rev. Y is associated with B who has a great deal of influence in Missouri and the Southwest. B is in turn Wall Street's agent—and Wall Street is under the control of John D. Rockefeller. Because she will not surrender to their wishes, they are now causing her to have many bitter enemies. They have turned her sister and her two half-brothers against her and have made the physicians of the Bellevue Hospital give her codeine in her food and put poisoned needles in her back. The Masonic Order and various newspapers are also against her.

The patient's sister states that the patient had written numerous letters to complain about this scheme of persecution. On several occa-

<sup>11</sup> *Op cit.*, pp. 269-275.

sions she has written to President Wilson and President Harding and also to the Attorney-General of the United States as well as many prominent municipal authorities.

In April 1921, while the patient was in St. Louis, she bought a revolver and planned to kill the Rev. Y. She had a period of excitement and was admitted to a state hospital at this time. After three months in this hospital she was discharged. After going to New York, as a result of threatening letters and frequent calling up of newspapers for protection, she was again admitted to a Psychiatric Institute and discharged against advice after a period of several months.

**Personal History.** E. E. was born January 18, 1884. Normal birth and development. At the age of 14 years, the patient began to have a series of childhood diseases including diphtheria, scarlet fever, and measles. No sequelæ of these diseases.

**School.** Edna attended school from the age of six, completing the seventh grade at the age of 14 years. She was very ambitious in school but made only moderate progress. Her sister feels that Edna was of average intelligence. After leaving school, the patient helped her mother with the housework. She was always fond of children and in 1907 she had charge of a playground in New York City. Since this time, the patient has had innumerable positions, mostly in hospitals or institutions; never, however, staying longer than two months in a position. She was always dissatisfied and complained that her abilities were not recognized. In later years, the patient left several positions to escape the persecutions of the Rev. Y and his colleagues.

**Habits and Sex.** Habits were normal. History of early autoeroticism, possibly homosexual experiences, but no history of heterosexual tendencies.

**General Make-up.** The patient's sister summarized the general make-up of the patient by stating that she was always extremely egotistical, ambitious, suspicious, and frequently misinterpreted a remark as applying to herself. The situation is interesting, as there has always been marked antagonism between her and her step-brothers and step-sisters. Her father had previously had six children, all of whom were well educated and have excellent positions. Edna feels that she was neglected from an early age; she was not given the means to complete her education, and that she did not get her share of her father's estate. There is no evidence that this is true.

Family History. Father died in 1912 at the age of 62 years. Mother died at the age of 45 years, of cancer. One full sister, age 43 years, single, living and well. Of the six children of the first marriage, only four are now living. The cause of death in the other children is unknown. No history of any mental disease, alcoholism, drug addiction, epilepsy, or insanity.

Summary of Mental Examination:

*General Demeanor.*—The patient was alert and suspicious until her confidence was obtained; then she became coöperative, quite circumstantial, and willing to relate her story.

*Talk.*—Spontaneous, relevant, and intelligent.

*Activity.*—Normal. Frequently helped out about the ward. Patient became mildly excited and over-active when she described her delusions.

*Mood and Special Preoccupations.*—The affect was normal and in keeping with the situation. Patient admitted having periods of depression when it looked like she was "fighting a losing battle" against her persecutors. She felt worried and concerned about being in the hospital as she realized that the question of her sanity was involved.

The patient displayed great interest in medical matters and claimed that she could cure tuberculosis and cancer by the use of herbs whose secret properties she alone knows. "I could put it all over on you doctors here, if I wanted to," she says. She states that she obtained this information from an old medical book which the doctors have long ago forgotten. Edna refused to give out the secret of her cures because everyone is jealous of her powers. Despite all arguments, the patient was sure of her medical prowess.

Delusions. Fixed and systematized delusions of persecution were present, involving mainly three persons—Rev. W, a Baptist preacher now dead; L. M., a business man, and Rev. Y, who since Rev. W's death is now the leader. A summary of her delusions is as follows:

"I have always desired to study for some profession such as medicine or law. I could not afford to begin these studies when I wished to; therefore, I wanted to study shorthand until I could go into my chosen profession. At the time I did not have the money to take a stenographic course, so I went to my pastor, Rev. W, to ask church aid in securing my education. After much persuasion on my part, the financial help was promised by Rev. W. After attending school a little while, Rev. W refused to pay my tuition bills and at

this time he began to slander my character, and spread broadcast accusations of immorality against me. I could not go to church without hearing uncomplimentary remarks from members of the congregation. Rev. W all but denounced me from the pulpit.

As I look back on this time (1910) I can see that all the misfortunes I had came from this source. All this was done by Rev. W to hide his own sin of drunkenness and immorality. Rev. W has always disliked me ever since I went to live in New York City and came back home with metropolitan customs and tastes. He had also been very intimate with my half-brother who had succeeded in getting my share of the family money and had increased the minister's dislike for me. Rev. W furthermore was doing all he could to keep me out of fame as he was jealous of my mental powers.

Rev. W was kept in his pulpit, it was stated, through the influence of L. M., president of ——— Co., who owns the whole city of St. Louis, body and soul. Rev. W subsequently died and L. M. procured another minister, Rev. Y (whose church I had attended six or eight times and had joined to escape persecution by Rev. W) as an agent in persecuting me.

The persecution is carried on now so insistently and in such well-arranged detail by Rev. Y, that now L. M. could play a relatively impassive part in the procedures against me (yet the patient states that it is L. M. who is really behind it all as director of the assault against her, and that two years ago she planned to kill him and procured a revolver for this purpose).

"Rev. Y and L. M. are trying to make me surrender to leading an immoral life. Rev. Y is L. M.'s agent and is kept in his church to add to L. M.'s political influence in Missouri and the Southwest. G. B. is in turn Wall Street's agent and Wall Street is under the control of Rockefeller. The strength of the persecution has been tremendously increased by the banding of the Masonic Order, the Order of the Eastern Star, and newspaper reporters against me. Because I will not surrender to the wishes of G. B. and Rev. Y, the league is now causing me to have many bitter enemies who force me out of employment by their false accusations."

Finally in, August, 1918, because of this persecution, Edna left St. Louis and sought employment elsewhere. She has since that time been forced to travel here, there, and yonder, and has not stayed in any one place much longer than three months. She lived in St. Louis, Ozark Mountains, Chicago, Indianapolis, Cincinnati,

New York, Philadelphia, Cleveland, and Pittsburgh. The patient claimed that lately, because she would not yield, efforts were made to poison her while in a New York Hospital by the doctors putting "poison needles" in her back and they next planned to use morphia. She said that the physicians were influenced to do this by the league against her.

Edna would not admit that any of her delusions were open to argument. She has spoken of many letters written about her to annoy her and persecute her, but when asked to present one of these letters as proof, she readily dismissed the subject by saying "these things are true—I know they are true." The patient has written many letters in her effort to refute the slanderous remarks that have been spread about her. She has written to prominent people, including Ex-President Wilson, President Harding, Mr. Wanamaker, the Goulds, and several state governors and mayors of three cities. Edna said she had written over three hundred letters in the past two years. During her hospital residence, she has written several letters in which she has set forth her personal history in great detail.

Hallucinations. Have not been present. The patient's reaction when asked if she heard voices was a perfectly normal one.

Sensorium and Intellectual Resources. Normal. She was clearly oriented for time, place, and person. No defects of memory for either remote or recent events. Retention was unusually good, showing ability to repeat seven digits backward. Retained eight digits. Calculation and general information were excellent. No speech or writing defects. Faulty judgment as pertains to her delusions as well as complete lack of insight.

Course in the Hospital. Her delusions of persecution have remained firmly fixed and systematized as noted in the above mental examination. Subsequently she has given the same account in detail to every doctor who has examined her. At times, she was very suspicious of all present and explained this by stating that L. M. and Rev. Y have banded many physicians against her. She was afraid that drugs might be used on her.

The patient was coöperative on the ward and never troublesome. She spent a great deal of her time in writing accounts of her persecutions. At other times, she was very reticent and refused to admit any delusions. She had no physical complaint of any sort. She accepted notification of transfer to another department as an inevitable result of her persecutions.

Physical Examination. Normal in every detail. Fair nutrition and general make-up. No endocrine disorder. Neurological examination was negative. Blood pressure 125/85. Detailed laboratory examinations were all negative.

### SUGGESTED READINGS

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## CHAPTER XIV

### THE PSYCHOSES (*Concluded*)

#### [SCHIZOPHRENIA OR DEMENTIA PRAECOX]

**Terminology.** The group of mental disorders which we shall consider in this chapter are most commonly subsumed under Kraepelin's term, "dementia praecox." It means, of course, in a literal sense precocious dementia, early loss of mind. Thus it implies, in accordance with the views of many psychiatrists, that the disorder is particularly characteristic of the age of youth or early maturity. More recently the term "schizophrenia" has been suggested by Bleuler as being preferable to the other; its literal meaning is "split mind," that is, a condition of mental disintegration or disorganization. This term is rapidly coming into use for two reasons: first, it is more and more recognized that this particular disorder (or group of disorders) occurs not only in the ages of youth and early maturity but also frequently in later years; and secondly, the term is quite generally believed to be fairly descriptive of the fundamental nature of the disorder, also implying, incidentally, that the disorder is primarily functional rather than organic. Therefore the word "schizophrenia" will be used exclusively in the present text. The student should keep in mind, however, in his collateral readings that the two terms always denote the same disorder, the same psychosis.

**Frequency of Schizophrenia.** Schizophrenia is by far the most common of all the functional psychoses, con-

stituting about 25 per cent of first admissions to mental hospitals and about 40 per cent of the patients in mental hospitals.<sup>1</sup> Hence of the 250,000 patients in mental hospitals in this country, 100,000 are cases of schizophrenia. It may help the reader to grasp the significance of these figures if told that there are about twice as many cases of schizophrenia at the present time in this country as there are patients in hospitals for tuberculosis. The following figures, cited from May,<sup>2</sup> differ somewhat from those just given. He estimates, on the basis of statistical studies, that there are about 120,000 cases of schizophrenia in the United States (1922), and that over one-half of the patients in mental hospitals belong to this class. (We might add, with respect to the prevalency of psychoses, "insanity," all types included, that for every individual in a college in the United States there is an individual in an "insane asylum.") Schizophrenia is about three times as common, proportionate to the population, in the cities as it is in the rural districts. Of 9,124 admissions of schizophrenia to the New York hospitals during a period of six and three-quarters years, 52.2 per cent were men and 47.8 per cent were women. With respect to the age at which the disorder is most likely to occur, the following table is instructive.<sup>3</sup>

<i>Age Group</i>	<i>Percentage</i>
Under 15 years.....	0.2
15 to 19 years.....	7.8
20 to 24 years.....	20.1
25 to 29 years.....	22.0
30 to 34 years.....	16.6
35 to 39 years.....	13.5
40 to 44 years.....	8.4
45 to 49 years.....	5.3

<sup>1</sup> Strecker and Ebaugh, *Clinical Psychiatry*, p. 219 Blakiston.

<sup>2</sup> May, J. V., *Mental Diseases*, pp. 458-460 Badger.

<sup>3</sup> *Ibid*, p. 459.

From this table it will be seen that the disorder is by no means confined to the period of adolescence and the years immediately following. Nearly 28 per cent of cases occur after the age of thirty-four, and about 65 per cent of cases after the age of twenty-four. We must emphasize the fact, however, that there is considerable difference between the statistics given by various writers. For instance, Stoddart, an English writer, says that  $12\frac{1}{2}$  per cent of first admissions are cases of schizophrenia,<sup>4</sup> which is only about half the percentage given by most American writers. Such a difference is in all probability to be explained largely in terms of the different diagnostic criteria employed not only in the different countries but by different individual psychiatrists. Schizophrenia is often very difficult to diagnose particularly in its early stages, and what one psychiatrist would diagnose as schizophrenia another might diagnose as manic-depressive psychosis, involutional melancholia, or some other disorder. That this should frequently be the case will become quite understandable as we take up the various symptoms and the different individual differences which characterize the disorder.

**A Difficult Disorder to Understand.** Schizophrenia is not only the most common of all psychoses, but it is also the most difficult to understand, "to feel one's self into." The manic-depressive's excitement or his depression does not impress us as being anything particularly fantastic, anything outside the realm of human experience. Most of us have moods of depression and of elation, and when we imagine such moods greatly exaggerated we recognize a certain similarity between them and those moods which appear to characterize the manic-depressive patient. And we can even understand to a great extent the delusions of the paranoic; for we have all felt at times that we were

<sup>4</sup> Stoddart, W. H. B., *Mind and Its Disorders*, p. 317. Blakiston.

somewhat downtrodden, or that we were of much greater consequence than the bare facts of our achievements really warranted. But in the presence of the schizophrenic patient this feeling of "kinship" is very likely to be wanting. Indeed, one gets some such impression as many persons appear to gain in the presence of monkeys or apes which are a little *too* human in their behavior. Not that there is a close analogy between the two situations but merely that in each case one perceives a sort of inconsistency or disharmony, an incongruity which simply will not fit in with his past experience. In the case of the monkeys and apes, this undoubtedly arises as a result of the fact that most of us have grown up believing that there is a very hard and fast line of demarcation between man and all other animals. Such a line of demarcation is quite apparent with respect to most of the animals with which we are associated. Consequently when we observe behavior in a lower animal which impresses us as being rather "human," we are wont to feel that there is something wrong, that things are not exactly as they should be; in short, what we observe at the time seems to belie our past experience. If one were to come across a stream of water flowing up a hill, he would undoubtedly become disturbed in somewhat similar fashion. Now let us inquire into the causes of this impression which so many normal individuals report upon their first contact with schizophrenic patients. In doing this we shall first take up those symptoms which are more or less common to all forms of this disorder.

**Some General Symptoms of Schizophrenia.** Undoubtedly the most common symptom of this disorder is *an emotional apathy and indifference in the patient with respect to other individuals*. According to McDougall,<sup>5</sup>

<sup>5</sup> *Op. cit.*, p. 370.

this is perhaps the only symptom which is common to all forms of schizophrenia. Whether or not this is so, it is surely the most apparent one. The patient may sit in the corner hour after hour for weeks, months, years, scarcely moving except for meals and to go and return from his bed. If you speak to him, he may give you a single glance, then return his gaze to the floor or the opposite wall. You plead, entreat, threaten, but he makes no response. He appears to be not only oblivious of your presence but also of the presence of the other patients, the doctors, and the nurses. You learn sooner or later that it is quite useless to try to break through his indifference. Some of these patients actually go for years without ever speaking a single word to anyone. One patient for years had never spoken to anyone except a certain nurse to whom she spoke quite freely and told of all that had taken place on her ward, often telling of mistreatment of the other patients by the attendants. She sat in the same chair day after day with lips tightly compressed and hands folded on her knees. Interestingly enough, a second patient sat across the room from and facing the first, also with compressed lips and folded hands. She had adopted the mannerisms of the first. But not all schizophrenic patients behave in this manner. Others walk about in circles or up and down the hall or sit smiling and mumbling over and over to themselves. If you approach them they may stop their whispering and remain very quiet till you leave or they may continue as before, taking no apparent notice of your presence. If you speak to them, the chances are they will pay no attention to you. Yet if you command them to carry out some simple act they may readily obey, proving that they have heard and understood what you said. Others may tell you of how they are being persecuted, how electricity is being passed through their bodies, or that they are mis-

treated during the night or that people are saying evil things about them. Still others lie in bed with tightly closed eyes or with stare fixed upon the ceiling, having to be tended as if they were infants, even frequently having to be forcibly fed. But whatever the particular behavior (or lack of behavior) and mannerisms of the patient, one is always confronted by the same lack of emotional response. The patient who tells of her persecutions does so with a striking absence of any display of emotions or feeling. She may actually be smiling while she tells about these terrible "experiences," although more commonly there is merely an apathetic sort of expression on her face. It is our emotions and feelings that lend color, tone, to our reactions, and when this tone is missing, one gets the impression that something is vitally wrong, that the patient is, as it were, in another world which is quite distinct from the world of objective reality with which the normal person deals. Finally we must mention still other patients who to the casual onlooker might appear quite normal. They go about their work systematically, engage in sports, dance, sing, attend chapel exercises, and converse rationally enough. It is only when their present is compared with their past that one is in a position properly to evaluate their reactions. Although such a patient may have a wife and family who are badly in need of support, he will perhaps tell you that he is quite content to remain in the hospital. One such patient told the writer that he got enough to eat and a place to sleep and that that was about all one could expect in life. Prior to his mental disorder he had been a very ambitious mechanic making good wages and taking a great interest in his family and affairs. So once again the thing we note chiefly is a certain emotional apathy and indifference, a loss of interest, ambition, and pride.

A second symptom and one which the writer believes to be quite as common to schizophrenic patients as the one just discussed, although it is frequently far less evident, is *a certain lack of harmony, integration, or coördination between affective or emotional and rational or intellectual reactions*. These two classes of reactions are not properly synchronized, the relationship which normally exists between them is lacking. Technically this symptom is known as *intra-psychic ataxia*, and it is primarily to it that the term "schizophrenia," indicating a split or dissociation of the personality, applies. In many schizophrenic patients this symptom is not apparent, but this fact may be due primarily to the absence of any type of overt reactions whatever. In other patients, however, it is very apparent. Thus it is easily discernible in the patient who tells one without the slightest show of emotion that she is being persecuted or that she is going to die that night, and in the patient who knows very well where he is and that he is considered "insane" but who at the same time declares himself to be quite content or even perfectly happy. Another patient, a woman, walks in a circle shouting "God damn!" in a loud angry voice. There is scarcely any expression on her face and if one walks toward her she simply turns away. Still another patient implores you in a very plaintive voice to take her home but all the time there is a preoccupied expression on her face giving you the impression that she is talking about one thing and thinking about something else. And then there is the patient who breaks forth in loud laughter, or perhaps merely giggles in a silly fashion without any apparent cause at all; and the patient who suddenly darts across the room and attempts to choke another patient who for hours has been doing nothing but stare at the floor. Such reactions also contribute to the visitor's feeling that he is among individ-

uals who in some radical way are different from himself, that they are concerned with facts and forces which are not apparent to him.

A third symptom which appears to characterize all schizophrenic patients is a *gradual mental deterioration*. But it is probable, at least in many cases, that the deterioration is merely apparent rather than real. For after all is said and done, there is no way of accurately measuring the intellectual ability of an individual who will not co-operate, and an absence of coöperation (inadequate responses to the presence and advances of another person) is, as we have said, the most common feature of this class of patients. The woman who sat with compressed lips refusing to utter a word was to all outward appearances mentally deteriorated. Yet she proved a very reasonable degree of mental alertness by her conversations with a certain one of the nurses. It is highly probable, however, that in most of those cases of several years' standing there is some mental loss. We should expect this to be the case since it is generally conceded that disuse tends to weaken any function, mental or physical, and the "self-imposed" seclusion of these patients definitely brings about a cessation of contact with the world about them. And so there is perhaps a mental deterioration in the same sense that the normal individual's mental functions, concerned, shall we say, with the science of chemistry, grow stale or deteriorate after long-continued disuse. After many years of hospital residence many of these patients appear to lead a purely vegetative existence, taking no interest in things about them, making no response to others, quietly sitting in a corner or pushing a floor mop day by day from year to year.

*Hallucinations*, particularly of hearing and vision, are fairly common during the early stages of schizophrenia.

Auditory hallucinations are much the more common and are most frequently of voices calling the patient bad names or making insinuating remarks. In a very large number of cases these voices have to do with sexual transgressions, imagined or real. In some cases hallucinations persist but seemingly in the majority they gradually die out after the initial stage of the disorder, or at least they become much less prominent.

*Delusions* also are quite common during the early stages of schizophrenia. Although usually of the paranoid type, they differ from the delusions of paranoia in being less permanent, far less systematized, and in the majority of cases of a more fantastic nature. These, too, in many cases tend to die out with the development of the disorder, while in some cases they persist as one of the principal symptoms of the disorder. Occasionally they are fairly systematized and permanent and in such cases a diagnosis of schizophrenia is made because of the presence of some or all of the symptoms mentioned in the preceding paragraphs. Although delusions of persecution are the most common, other varieties are frequently found. The fantastic nature of many of the delusions of schizophrenics is particularly striking. One patient declared there was an orchestra playing in his stomach; another declared electric wires were attached to his brain; a third believed he had no heart. In addition to the hallucinations and delusions of these patients, one frequently finds "ideas of reference" (the belief on the part of the patient that others are making disparaging remarks about him), and "ideas of influence" (the belief that others are exerting a hypnotic or an electrical or some other peculiar type of influence over him). One study of the symptoms of a group of 200 schizophrenic patients revealed paranoid ideas in 118, hallucinations in 130, ideas of influence in 60, and ideas of

reference in 30.<sup>6</sup> It will be observed that ideas of influence and ideas of reference are merely special forms of delusions.

**Different Forms of Schizophrenia.** Thus far we have been discussing certain symptoms which are common to all cases of schizophrenia and other symptoms which are more or less likely to be present at some time or other in any given case. We now turn to different forms or types of this disorder. These different forms are not mutually exclusive; rather they are distinguished on the basis of the relative prominence of some one symptom or group of symptoms rather than on the basis of an absence of certain symptoms. In other words, the most common type of schizophrenia is the mixed type, strictly speaking. Ignoring the mixed type, which in a sense would perhaps include all cases, it is customary to distinguish four forms: *simple type*, *paranoid type*, *catatonic type*, and the *hebephrenic type*. With respect to the relative frequency of these different types, the following tables<sup>7</sup> are instructive. The first table is of cases in New York institutions, the second of cases in institutions in Massachusetts, the third of cases in nineteen other institutions, and the fourth is a composite of the three preceding tables. The disagreement apparent in these tables should perhaps be attributed primarily to differences in diagnostic criteria employed.

#### NUMBER OF CASES

##### I

Type		Percentage
Paranoid.....	3579	58.34
Catatonic.....	468	7.63
Hebephrenic.....	1463	23.84
Simple.....	625	10.19

<sup>6</sup> Strecker and Ebaugh, *Clinical Psychiatry*, p. 222. Blakiston.

<sup>7</sup> May, J. V., *Mental Diseases*, p. 457. Badger.

## II

Paranoid.....	1248	.....	42.72
Catatonic.....	678	.....	23.21
Hebephrenic.....	828	.....	28.34
Simple.....	165	.....	5.64

## III

Paranoid.....	800	.....	25.12
Catatonic.....	438	.....	10.61
Hebephrenic.....	1666	.....	52.32
Simple.....	230	.....	7.22

## IV

Paranoid.....	5627	.....	45.97
Catatonic.....	1584	.....	12.12
Hebephrenic.....	3957	.....	32.32
Simple.....	1020	.....	8.33

*Simple schizophrenia* (schizophrenia simplex) is undoubtedly much more common than hospital statistics indicate. It appears to be the consensus of opinion that a fairly large percentage of hoboos, prostitutes, and criminals have histories of schizophrenic crises. The onset of the disorder may be quite gradual or, to all appearances, it may be very sudden. If gradual, the first indications usually noticed are *loss of interest and ambition, a developing emotional apathy and indifference, an ever-increasing tendency toward reticence and seclusiveness, perhaps depression, and a general tendency to regress to earlier interests and activities*. It is observed that the individual takes less interest in his work and play, that he is becoming negligent with respect to his personal appearance, and that he sits around day-dreaming a good deal. Where the onset is sudden, the picture may be quite different: the individual may become suddenly quite ill, have considerable temperature, become excited and perhaps delirious. Hallucinations and delusions may be present, which tend

to disappear with the progress of the disorder. After the initial crises is past, the individual tends to settle down to a routine existence, being largely without interest in things about him and quite devoid of ambition, emotionally rather apathetic, and showing some apparent intellectual deterioration. He may continue with but little change to the end of his life, although usually there is a gradual mental deterioration. It is now that one is unable to distinguish between him and the feeble-minded person without knowledge of his past history. The following case is somewhat typical of this class of patients.

CASE 30. A man of twenty-five of Irish descent left his home one morning for a neighboring town for the purpose of withdrawing some money from his bank. On the train he became very nauseated and alighted at an intermediate station. An hour later he took another train and again became very sick, but continued until he had reached the town for which he had set out. He was still very sick but proceeded toward the bank. When about half-way there he turned around and went back home without afterward being able to say why he did not go on to the bank. For the next two days he was quite ill, very much excited, hallucinated voices, and thought he was going to die. He was removed to a psychopathic hospital for observation. In a few days he quieted down. During the next four months, at the end of which time the writer saw him, there was no apparent change in him. He was perfectly oriented, had a good memory for his past life, talked intelligently enough but without emotion or interest. He said he would like to return to his wife and child but at the same time said he was quite content to remain at the hospital if the doctors wanted him to. He was a good worker on the hospital farm, played handball, and danced at the social gatherings. One day upon leaving, after talking to the writer, he emptied his pockets of their contents and insisted that the writer should accept them. The collection was interesting and might well have come from the pockets of a normal boy of nine or ten—an old pocket knife, some colored rocks, a highly colored woman's garter, some small change, a piece of a fountain pen, and some pieces of string were among the contents. At another time the writer observed a

peculiar reaction in this patient while giving him a form board test. The patient had placed blocks in all the depressions but the last one when he found himself with a triangular block and a circular depression. He tried several times to make the block go into the depression, but it was too large. Then suddenly he took a dime from his pocket, placed it in the depression and leaned back in his chair apparently perfectly satisfied with his completion of the test. Thus, whereas his conversation concerning his past life had appeared intelligent enough, as soon as he was confronted with a new situation he revealed a definite lack of comprehension.

It is extremely difficult to describe or characterize adequately the simple schizophrenic—he appears so normal and yet there is something lacking. Perhaps we may say by way of a general characterization that he impresses us as having “lost the edge of his personality”; he is blunted with respect to all three aspects of his mental make-up, the conative, the affective, and the cognitive.

The *paranoid schizophrenic* is characterized, typically, by *delusions of persecution, ideas of reference, ideas of influence, and emotional apathy and indifference*. A differential diagnosis between schizophrenic paranoia and true paranoia is often very difficult to make and undoubtedly many cases would be differently classified by different psychiatrists. In general we can say, however, that the delusions of schizophrenia are less systematized, less permanent, and more fantastic than those of true paranoia. Moreover there is always to be found in the schizophrenic the emotional apathy and indifference and the intrapsychic ataxia, although frequently neither of these is so very apparent. The following case illustrates the fantastic nature of some of the delusions of these patients and also seems to indicate a certain emotional apathy.<sup>8</sup>

<sup>8</sup> White, Wm., *Outline of Psychiatry*, pp. 213–214. Nervous and Mental Disease Publishing Company.

CASE 31. Male, aged 32 years. On admission to this hospital the patient was well oriented in all spheres, showed no clouding of consciousness, was neat in appearance and tidy in habits, took a normal interest in his surroundings, assisted with the ward work, and adapted himself readily to his new environment. He showed no disturbance emotionally as a rule, but when the subject of his sojourn here was broached, he worked himself up into a slight passion. He gave evidence of being slightly suspicious, and on one or two occasions exhibited delusions of reference. He elaborated a fairly well-organized system of persecutory delusions in which many people were involved, among these, some high officials in the Army and Navy, and this delusional system took its inception in the latter part of 1908, while the patient was a member of the Seamen's Gunners' Club at Washington, D. C. He claims that the first trouble started through the instigation of certain false accusations by fellow Masons, that the men at the class tried in every way to make life miserable for him, that he had heard them call him various unmentionable names, with a view of blemishing his character. On one occasion they administered to him an overdose of iron, quinine, and strychnine, on another, they tried to poison his food. They refused to eat with him at the same table, had detectives watch him, etc. He says back of all this stood some high officials of the Navy and Army, that he saw one of these give the sign to the other man to torture the patient, that the reason these officials had them persecuting him was the fact of the patient's invention of some dirigible aëro torpedoes with proper detonators, and these officials stole the patent from the patient and then sold it to the combination of three European countries; and it was to their interest to get rid of the patient in some way in order that he should not expose them, as he had knowledge of this treasonable transaction.

The delusions of this patient were quite well systematized and much less fantastic than the delusions of many of these patients. It is in the case of such a patient that a differential diagnosis is difficult; another psychiatrist might conceivably have diagnosed him as a case of paranoia, assuming, of course, no other symptoms were present than the ones mentioned in the report given above.

*Catatonic schizophrenia* is characterized by *negativism*,

*catalepsy*, *suggestibility*, *stupor*, *excitement*, *mannerisms*, *stereotypy*, etc. They are sometimes separated into two classes: those characterized by stupor and those characterized by excitement. The onset of the disorder is usually somewhat gradual, marked by headache, insomnia, emaciation, loss of appetite, etc. On the other hand, the onset is occasionally very sudden, the patient usually going into a deep state of depression and stupor. In many of these patients the phases of excitement and stupor alternate in an irregular order. Catatonic stupor is characterized chiefly by stupor, negativism, and muscular tension. In its extreme forms the patient lies perfectly still, making no response if spoken to or, sometimes, even if a pin is thrust into him. He has to be tended and forcibly fed. Not only is he completely indifferent but he is usually negativistic—if he is told to open his eyes he closes them more tightly, if told to speak he compresses his lips. If the stupor is less extreme he may stand on the ward, assuming a certain posture without altering it for hours. An attempt to move one of his arms may be met by considerable resistance. In other cases there is a condition of waxy-like rigidity of the muscles; the arms offering no resistance when moved and remaining in any position in which they are placed. This condition is called *catalepsy*. Along with this cataleptic condition there is found a peculiar sort of suggestibility—called *command automatism*—the patient doing in a mechanical sort of way whatever he is told. This heightened suggestibility sometimes leads to the patient's repeating the questions and remarks of the person who is talking to him—*echolalia*—and to the repeating of movements made in his presence—*echopraxia*.

It is common to distinguish two types of stupor: *benign stupor* and *malignant stupor*. Some authorities make a diagnosis of schizophrenia (dementia praecox) only in the

case of the malignant stupor, classifying cases of benign stupor as manic-depressive psychosis.<sup>9</sup> Hoch and others have adduced rather conclusive evidence to the effect that benign stupors are almost invariably associated with delusions of death, the patient often believing himself dead, or waiting to be put to death. In the case of malignant stupors there are also apparently ideas of death but other delusions as well. "In *malignant stupor* reactions there are, in addition to the fundamental symptoms of benign stupor, limitations of energy, emotion, and ideational content, . . . indications of fantastic thoughts, displacement of affect, anomalous symptoms such as inexplicable giggling and outbursts of rage, delusions other than ideas of death, and speech that is quite scattered, in short, inconsistencies in the stupor reaction and the inclusion of schizoid characteristics."<sup>10</sup>

In contrast to the stuporous phases which characterize these patients the alternating phase of excitement is marked with an increased psychomotor activity. Superficially this state bears a close resemblance to the excitement of manic-depressive psychosis. However, the actions are much more incoherent, are not directed toward any definite end, and frequently show a great deal of repetition. Thus the patient may make the same movement over and over almost endlessly, swaying the body back and forth, swinging the arms in a certain fashion, shouting the same thing over and over (verbigeration), as in the case of the woman who kept shouting "God damn!" from morning till night. This tendency to repeat the same phrase or sentence is clearly shown by the following example given by White.<sup>11</sup>

<sup>9</sup> Hoch, August, *Benign Stupors*. Macmillan.

<sup>10</sup> White, Wm., *Outlines of Psychiatry*, p. 208. Nervous and Mental Disease Publishing Company.

<sup>11</sup> *Ibid.*, p. 209.

"What is your name?" "How old are you?" "About thirty." "How long have you been here?" "A couple of years." "What do you do most of the time?" "Fold shirts in the laundry and mend clothes." "Do you talk to yourself?" "I do not talk to myself; talk to other people, also talk to all the people I run across." "What do you talk about?" "Talk about the weather, etc." "What is that you say to yourself?" "Locks and keys, keys and locks, locks, keys, keys, locks, locks, locks, keys; just a sort of doggerel (perseveration). You know some of the attendants might get hold of me and punch me. Locks, keys, keys, locks, locks, keys, keys, locks. You know if they was to run across me making too much noise they might hurt me." "What do you say locks and keys for?" "Just to enjoy myself. You know there are times when there is nothing doing, and I have to do it to pass away the time, and you might just as well say something as nothing." "What did you say the other night to the students?" "Told them about locks and keys." "What else?" "Myriads of us keep growing in numbers, also in largenesses; locks and keys, keys, locks, locks, keys, keys, locks, locks, keys, keys, locks. Myriads of us quick-foot full through, ev-er no mat-ter. Locks, keys, keys, locks, locks, keys, keys. Myriads of us ev-er full us as keep lives giant's growths, ev-er lives giants keeper, ev-er no mat-ter. Locks, keys, keys, locks, locks, keys, keys, locks. Lives giant's wealth, health, and pleasures, ev-er no mat-ter. Lives sweet foreigners, ev-er no matter." "Can't you recite some more poetry?" "I cannot give any more; locks, keys, keys, locks, locks, keys, locks, Me don't know any more; locks, keys, keys, locks, locks, keys. I will get in trouble. I have been raking away at it outside and in and inside out again. I have tried to write poetry but could not write any more than six fools."

The tendency to perseveration which is well illustrated in the preceding example is to be observed in other slightly different forms. One patient repeats exactly the same sentence every morning upon the approach of the physician; another walks up and down the same path or describes a circle always in his walking, or alternately flexes one and then the other arm. This tendency to stereotype certain reactions is called *stereotypy*. *Mannerisms* are also common, in which the patient may walk always against

the wall, or always start off with the same foot, or stand on one leg, or swing one arm and hold the other rigid while he walks, etc. If asked why he does these things he will say he does not know, or that it is the will of the Lord, or give some other equally absurd answer, or not answer at all.

The following report of a case of catatonic schizophrenia has been excerpted from a report by Strecker and Ebaugh.<sup>12</sup>

CASE 32. The onset was Nov. 19, 1919, following the arrest of two Bolshevik workers in the button factory in which she was employed. The patient at this time was teased by the other factory workers and was told that her father and her sisters would be the next ones arrested. She returned home that evening expressing great anxiety about her father and her sisters, stating that the Bolsheviks had followed her home and were going to kill her family. At 10 o'clock she became actively hallucinated, stated that she could see the Bolsheviks climbing the telephone pole on the outside; thought that she could see people looking at her from the walls of her room, and that she could see birds and geese. She said that she heard people saying that they were "going to arrest the whole family"; they were "going to take her talents away from her." She thought that electric wires were connected with her brain, and that the Bolsheviks were going to twist her brains out. This period of visual and auditory hallucinations was quite marked during the next three weeks, during which time the patient showed extreme overactivity, shrieked, cried, prayed, and sang alternately. On one occasion while reacting to the hallucinations she ran out in the yard at 3 A.M. in her night clothes, singing and praying. She quarreled with the other members of the family, and on several occasions threatened to kill them. During this period of active hallucinations the evidence is that she was not delirious, since her sister stated that the patient knew where she was, and was in contact with her environment as well as with time. The patient had almost complete insomnia and all measures to reassure her were unsuccessful. In the intervals in which she was quiet she was noted to groan, smile, and laugh in a silly manner. Following this period of active excitement and hallucinations the patient, on December 8, 1919, had a

<sup>12</sup> *Op. cit.*, pp. 238-244.

fairly normal day. In the morning she followed her mother to church, and nothing unusual was noticed in her demeanor, except a tendency to stare at people. In the afternoon the patient was quiet, played the piano and sang with her sisters. After taking a walk in the early evening, at 9 o'clock she grimaced for a while and after that remained absolutely rigid in her chair. She became entirely uncommunicative and resistive and had to be carried to bed. She has remained rigid ever since; has become completely bedridden. The patient refused to eat and it was only with great difficulty that her family and physician were able to force her to take a little liquid. . . .

During the first two months of her stay in the hospital the patient continued to show complete mutism and negativism with refusal of food. The tendency to spring resistance became more marked, and she showed some tendency to catalepsy. Later she made a few spontaneous utterances, recognized her mother and sisters on visiting day, and sang Bohemian songs for  $1\frac{1}{2}$  hours after they had left. At this time she was but mildly resistive to tube feeding and made frequent attempts to speak, judging by movements of her mouth. On one occasion she stuck out her tongue and allowed the ward physician to prick it. Her stupor was less marked and she gradually became more alert and in better contact with her surroundings. . . .

November 7, 1920 she was committed to a state institution. . . . During patient's residence here she has been inaccessible, catatonic, passively resistive, inactive, and sleeping sufficiently. She has to be dressed and undressed, bathed, taken to the toilet at fixed intervals, and fed. She sits in a fixed attitude with forearms extended in front of her, facial expression masklike, and lower extremities stiff. She exhibits *flexibilitas cerea* and cannot react to questions. This catatonic condition was more marked some days than others, inasmuch as at times she will not answer at all; at other times mumbling with lips tightly closed in scarcely audible tones. About two weeks ago when her relatives visited her she talked freely and without much constraint, but since then she has been quite inaccessible. She often calls the resident physician "Heavenly Father," and repeats over and over little phrases such as "I want to be good, Heavenly Father; wait a minute, Heavenly Father, I want to be near my Jesus, Heavenly Father," etc. There was no emotional variation.

Into the *hebephrenic class* are placed those patients who do not fit, symptomatologically, into one of the other

three groups. The onset is usually quite abrupt and the prodromal period is generally marked by insomnia, headache, confusion, depression, hallucinations, and delusions. The delusions are even more fantastic and bizarre than in the paranoid type, the hallucinations perhaps more numerous and prominent. All the symptoms seem to be of a more transient and unstable character. Thus the delusions are scarcely at all systematized and the patient does not assimilate them into his own personality. The speech may be almost completely incoherent, a veritable "word salad," devoid, seemingly, of all unity and meaning. Note the following example, given by White.<sup>13</sup>

"How old are you?" "Why, I am centuries old, sir." "How long have you been here?" "I have been now on this property on and off for a long time. I cannot say the exact time, because we are absorbed by the air at night, and they bring back people. They kill up everything; they can make you lie; they can talk through your throat." "Who is this?" "Why, the air." "What is the name of this place?" "This place is called a star." "Who is the doctor in charge of your ward?" "A body just like yours, sir. They can make you black and white. I say good morning, but he just comes through there. At first it was a colony. They said it was heaven. These buildings were not solid at the time, and I am positive this is the same place. They have others just like it. People die and all the microbes talk over there, and prestigitis you know is sending you from here to another world." "Do you know what year this is?" "Why, centuries ago." "Do you know who discovered America?" "Yes, sir; Columbus." "What year?" "1492; they have had several discoveries since then, sir." "When was the Civil War?" "That was in 1864-1860-1864." "Who was the President of the United States at that time?" "Well, let me see; they make you over again, sir." "When did you enter the army?" "I entered the army, why it was centuries and centuries ago; not I but a body just like my remembrance around 1903." "Were you ever in Cuba?" "Yes, sir; I was there three times. That was centuries ago; not I but my remembrance, because I had been killed; yes, I had been

<sup>13</sup> *Op. cit.*, p. 206.

killed, I am positive of that. Over there originally—originally means first—they remake us. There are other stars like this. I was sent by the government to the United States to Washington to some star, and they had a pretty nice country there. Now you have a body like a young man who says he is of the prestigitis.” “Who was this prestigitis?” “Why, you are yourself. You can be a prestigitis. They make you say bad things; they can read you; they bring back negroes from the dead.”

Perhaps in this type of patient more than in any other the condition of *intra-psychic ataxia* is apparent. The *silly laugh*, for instance, is very common; many of these patients begin to giggle at the appearance of every visitor and whenever spoken to. Some of them remind one strongly of the sexually excited adolescent girl, not only in the matter of their silly laughter but by ornamenting themselves with scraps of ribbon, colored strings, etc. Like the other types of schizophrenic patients they are emotionally quite apathetic and indifferent not only to their own appearance but also to the presence of others. It is not infrequent for patients of this class to masturbate quite shamelessly regardless of who is present.

Many theories and interpretations have been advanced with respect to the cause and the nature of schizophrenia. Of these we shall mention only a few and those but briefly.

**Some Theories of the Cause and Nature of Schizophrenia.** Many writers are of the opinion that heredity plays the essential rôle in the production of this disorder. Stoddart says, “The history of patients suffering from this disorder usually discloses the fact that they come of insane stock, generally on the maternal side, and frequently that theirs is not the first case of dementia praecox in the family.”<sup>14</sup> White, a well-known American psychiatrist, expresses his view, in part, as follows:<sup>15</sup>

<sup>14</sup> *Op. cit.*, p. 317.

<sup>15</sup> *Op. cit.*, p. 192.

"Wolfsohn has made a study of the material of the Burghölzi Asylum at Zurich with a view to the determination of the frequency of the hereditary factor. Of 2215 admissions there were 647 cases of dementia præcox. About 90 per cent. of these showed hereditary taint: of four hereditary factors insanity was the most frequent (about 64 per cent.), followed by nervous diseases, alcoholism, and other forms of hereditary taint: heredity was combined in about 34 per cent. . . .

"Every individual born into the world has, if it could be determined, a definite potentiality for development. The force of the impetus which starts it on its path is sufficient to carry it a certain definite distance. The predetermined goal, in each case, will be reached if no accident intervenes to prevent. In the subjects of this disease the original impetus has been weak, only sufficient to carry them a short way and when its force is spent development stops and the retrograde process is hastened, or perhaps immediately initiated by some special physical or mental stress occurring at the critical point of puberty and adolescent evolution. As the French have it, these patients are 'stranded on the rock of puberty.'" This it seems is not only taking a very pessimistic view of the cause and nature of schizophrenia but a view which is by no means fully substantiated by facts. According to one of the most exhaustive statistical studies yet made of this problem,<sup>16</sup> it was found that a full 50 per cent of the cases showed no evidence of unfavorable heredity. And with respect to White's contention that each individual possesses to begin with a certain definite potentiality for development and that in the case of the schizophrenic this potentiality is sufficient to carry him only

<sup>16</sup> Pollock, Horatio M., "Dementia Præcox as a Social Problem," *The State Hospital Quarterly*, August, 1913.

a certain distance, it need merely be pointed out that such a view really leaves no place for the great rôle which environmental influences are generally conceded to play in the individual's development both of adjustive and of nonadjustive reactions. The most an insufficient potentiality could account for would be an individual's lessened activity and not its specific trend or direction.

Another theory of schizophrenia which has received considerable support is that it is due to *endocrine deficiency and disturbances*. Only if we postulate a separate hormone for essentially every type of mental activity can we explain fully in this way mental activity of a certain nature. At the same time it is not wholly improbable that endocrinal disorders may play a part. The principal exponent of this theory which is currently known as the *auto-intoxication theory* is Kraepelin; according to whom the endocrinal disturbance is primarily of the sex glands.

Several different psychological or psychogenetic theories have been advanced. Meyer's theory, which appears rapidly to be gaining favor, holds that *schizophrenia is fundamentally a matter of vicious habits*. Thus he says:

Every individual is capable of reacting to a great variety of situations by a limited number of reaction types. The full, wholesome, and complete reaction in any emergency or problem of activity is the final adjustment, complete or incomplete, but at any rate clearly planned so as to give a feeling of satisfaction and completion. At other times there results merely an act of perplexity or an evasive substitution. Some of the reactions to emergencies or difficult situations are mere temporizing attempts to tide over the difficulty, based on the hope that new interests would crowd out what would be fruitless worry or disappointment; complete or incomplete forgetting is the most usual remedy of the results of failure, and just as inattention and distraction correct a tendency to overwork, so faultfinding

with others, or imaginative thoughts, or praying, or other expedients, are relied upon to help over a disappointment, and, as a rule successfully. Other responses are much more apt to become harmful, dangerous, uncontrollable. What is first a remedy of difficult situations can become a miscarriage of the remedial work of life." <sup>17</sup>

One objection to be made to this theory of Meyer is that it assumes the vicious habits to be largely intellectual, whereas it is quite generally agreed that the disorder is fundamentally of an emotional nature. Incidentally it will be observed that the theory is more strictly an interpretation of the nature of the disorder than it is an explanation of it. That many of the reactions of the schizophrenic are of the nature of habits and are vicious and nonadjustive is self-evident; but pointing out that such habits develop does not tell us in any clear sense why they develop.

Jung sees the disorder primarily as *the manifestations of repressed complexes*. He distinguishes two fundamental trends of the libido (the motivating or dynamic principle in the individual), a progressive or forward trend and a regressive or backward trend. Upon coming into conflict with reality and being blocked, the energy of the individual may become directed inward and backward. This results in a re-awakening or revival of earlier interests and modes of reaction and thus we get the childish, silly, adolescent and pre-adolescent behavior characteristic of this class of patients.

McDougall suggests that the secret to an understanding of schizophrenia is to be found in a study of the relationships existing between the mental dispositions which enter into the organization of the sentiment of self-regard. Thus

<sup>17</sup> Meyer, Adolph, "Fundamental Conceptions of Dementia Præcox," *British Medical Journal*, 1906.

he writes, "Now, the maintenance of normal social relations, normal *rapport*, is rendered possible only by a balanced harmonious development of the sentiment of self-regard; in normal healthy development we learn to oscillate smoothly and readily between self-assertion and submission, the excess of either tendency being prevented by the coöperation of the other; towards certain persons and certain phases of other personalities we are deferential, admiring, docile, submissive; towards others, or other phases, we are self-assertive and dominating; in either case the affect expresses itself freely. The normal youth learns, through a thousand experimental approaches to other persons, to distinguish between those to whom he must defer and those over against whom he can assert himself; and thus he learns to range himself in his due place in the social order. But the schizoid<sup>18</sup> never learns to range himself comfortably in his due place; and, in spite of the strength of his self-regarding affects, they obtain no free and natural expression. The self-regarding affects are, as it were, nipped in the bud, inadequately expressed; their expressions are repressed."<sup>19</sup>

We have scarcely more than mentioned these different theories; for an adequate understanding of them the reader must refer to their original sources.

Drawing freely both on facts and theories, we shall now endeavor to give the reader a somewhat unified picture of the schizophrenic, with respect to the nature of the disorder, its causes, and its mode of development. It must be kept in mind that in doing so we shall be dealing with a composite or ideal type; every individual, whether normal or abnormal, differs more or less from every other individual, and therefore our descriptions and

<sup>18</sup> The term "schizoid" is applied by Kretschmer to a personality type which is very similar to Jung's introvert type.

<sup>19</sup> *Op. cit.*, p. 387.

explanations may fit any specific case only in a more or less general way.

To begin with, we have the fact, noted by most writers, that this disorder usually develops in the shut-in, introverted, or schizoid type of personality. This fact we believe is of fundamental importance to an understanding of the genesis and the nature of the psychosis. And in keeping with certain of the fundamental concepts mentioned in this text, we should then conclude that schizophrenia is primarily the result of adverse environmental influences, and that hereditary traits play but a secondary rôle. McDougall, although contending that "There can be no doubt that introversion and extroversion are in the main inborn constitutional peculiarities; that the extreme types are born rather than made," nevertheless places a great deal of emphasis upon the early conditioning of the schizophrenic. Thus he writes: "In a similar way, the opposite treatment of the growing boy may be supposed to predispose to Schizophrenia, to engender, in the person of introverted temperament, the schizoid character. The history of many cases of Schizophrenia bears out this supposition. We find a history of a 'spoiled' child, one who has been over-indulged, who, on the one hand, has never learned to face difficulties and, on the other hand, has never been compelled to obey, to submit, to defer, and never been stirred to whole-hearted admiration, respect, or reverence; one, in short, who has learned neither to command nor to obey, has acquired neither self-confidence nor due humility, and has not learned to swing readily from the one attitude to the other, as social circumstances demand; one also who has not learned to be humorous." <sup>20</sup> But although it is quite generally agreed that this disorder is peculiar to the in-

<sup>20</sup> *Op. cit.*, pp. 392-393.

troverted type of individual, we do not believe that it is merely a matter of extreme introversion. Rather it is the development, in certain introverted individuals, of peculiar modes of reaction to difficulties. The individual is introverted and seclusive from an early age. By sparing him the trouble of meeting his own problems, others keep him from ever developing to any complete extent the emotional side of his nature; he is spared strong emotional reactions, and consequently he grows up to be the individual who impresses us as being emotionally shallow, who is cool and unsympathetic, who cannot enter into human activities with the depth of feeling and enthusiasm which characterizes the person with the strong and relatively fully developed personality, the person whose emotional experiences have had depth (intensity) as well as breadth. For our schizoid individual has been too well guarded by his introverted tendencies, and usually by his environmental factors also, ever to have known success and the glow of satisfaction which comes with it, or failure and the unpleasant affect which follows. But upon reaching pubescence, or later, he is sure to meet with situations which he is not only unfitted to handle but which arouse strong emotional reactions which seem quite foreign to him. As is typical of the introvert, he now withdraws from others to sit and brood over his difficulties or failures, and to attempt to overcome them by an excessive amount of day-dreaming. Increasing age and the need of assuming more and more responsibility make reality increasingly more distasteful to him, and in proportion his day-dreams become more pleasurable and satisfying by contrast. He is now in a position to all but lose sight of the real world and to lose himself in his own world of dreams. His command automatism, catalepsy, negativism, and stupor may be viewed in part as indications of his hes-

itancy to respond to the objective world. If spoken to, he has a tendency to respond, but to respond necessarily means to assume a positive attitude toward his environment. At the same time there is a tendency to remain in his retreat, in his seclusion from reality. Consequently he may respond at one time and not at another, or he may give but a partial response, or he may make no overt response at all, or he may respond in the opposite manner, depending upon the relative strength of these two tendencies. Along with his loss of contact with others and his excessive day-dreaming, his reactions tend to be of an infantile nature, no longer being adequately related to objective facts.

McDougall points out that schizophrenia has all the characteristics of greatly exaggerated "embarrassment" or "morbid self-consciousness" and believes that this is really the essential nature of the disorder. The individual is unable to assert himself in a definite manner and he is likewise unable to submit graciously. Unlike the manic-depressive (who is supposed to develop from the extroverted or cyclothymic type) he is unable to break the deadlock, to switch from one type of reaction to the other. The manic-depressive's difficulty lies in the fact that he goes too far and remains at one extreme or the other too long; the schizophrenic's difficulty lies in the fact that he is unable to swing from one type of reaction to the other. This inability in the schizophrenic and in the schizoid personality to decide upon a definite course of action seems to be clearly indicated in the following case, cited from McDougall.<sup>21</sup>

CASE 33. A man of twenty-three years was admitted to hospital as a case of katatonic stupor. He had been over-indulged by a fond widowed mother, and had been indolent, timid, and yielding before

<sup>21</sup> *Op. cit.*, pp. 374-375.

all difficulties. He had taken various jobs and succeeded in none. He had indulged in secret drinking, cheap fiction, and self-abuse. The last had occasioned much shame and anxiety about his health. Two years before the breakdown he had engaged in a prolonged flirtation, involving much "petting," with a married woman, Y, a friend of the family. This affair kept him under constant sexual stimulation; but his impulse was always inhibited by his fear of consequences and his sense of guilt. He became more active, restless, quarrelsome, and fearful. He began to dread that he might be accused of having raped Y; and then the same fear arose in connection with other women, strangers and casual acquaintances. He became still more concerned about his health. "Three weeks before admission he began to hear imaginary voices. These voices accused him of rape, and spoke of the terrible state he was in. . . . It had been noticed shortly before this that he was becoming very dull and inactive. He got so that he would stand for hours in front of a chair as if undecided whether to sit down or not. Five days before admission he refused food altogether, and held his urine and faeces as long as possible. When brought to the hospital he was in a dull, stuporous condition for some time and then slowly began to improve. After eight months he would smile when spoken to, but still refused to speak." He continued to improve but relapsed after an intermission. "He showed a good memory for the time of his apparent stupor. . . . He said that while he lay in bed, apparently dull and indifferent, he was really quite keenly alert to all that went on about him, and that his mood, instead of being one of indifference, was throughout this period one of intense fear. He had been much frightened at being dragged away to a hospital. He believed he was going to die and never see home again. At first he thought the place was a prison and that he had been brought here for drinking and being so stubborn and foolish. . . . He feared he would develop *delirium tremens*. . . . During the first few months he continued to hear voices. They still accused him of committing rape, and made remarks about his unfortunate condition. Then his fear began to abate; he ceased to hallucinate. . . . He attributed his peculiarities of conduct to fear. He said that he lay still because he was afraid to move. He was afraid to eat, afraid to urinate or defecate. . . . He moved more with one particular attendant than with any of the others, because he knew him better and because this man was always very gentle with him. . . . His mind was found to be still dominated by erotic

ideas and a strong affect of fear, which found its most striking expression in the old idea . . . that he might lose control of himself and commit a sexual assault upon some woman."

This case, like many others, brings out the fact that the stupor, the paucity of mental activity, and the emotional apathy and indifference in these patients may be and perhaps are more apparent than real; and also that there is usually to be found evidence of intense mental conflict and repression, prior to the appearance of the symptoms.

We may conclude by saying that just as many normal individuals periodically lose themselves quite completely in their day-dreams or reveries, oblivious for the time of their surroundings, unaware of time, place, and person, so the schizophrenic appears to have lost himself not only completely but quite permanently in his day-dreams, leaving his reactions to his external environment more or less devoid of feeling, coherency, relevancy, and purpose.

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## CHAPTER XV

### SLEEPING

**Why We Study Sleeping.** Sleeping and the topics to be discussed in the two following chapters,—dreaming, and suggestion and hypnosis,—have a twofold interest for the student of abnormal psychology. First, they are of interest in themselves as more or less distinct types of activity and, secondly, they provide the student with a means of gaining considerable insight into the nature of mental organization and personality in general and, when carefully studied in relation to a specific individual, of gaining a better understanding of that individual's particular personality or mental make-up. Also, of course, they may become definitely abnormal when nonadjustively attached or related to the individual's environment or when they are used by the individual for some purpose other than their biologically and socially proper one, or when they are disproportionately aroused and carried to an extreme.

**Some Aspects of Sleeping.** We shall begin our discussion of sleeping by assuming it to be a definite reaction of the individual, rather than merely an absence of reaction, a view which will, we think, become clearer and thoroughly substantiated in the course of the chapter. The first thing to attract the psychologist's attention in observing the sleeping individual is that he does not respond to the forces or stimuli in the world about him as he does in the waking state. We may speak to him but he

does not answer or give any indication of having heard us; we turn on the light and still he sleeps on; we brush our hand across his face but he gives no sign of perceiving it; we may even hold a bottle of hydrogen sulphide to his nose without getting any response. In short, we can say that the stimulus-thresholds have become raised, or that the threshold of consciousness is higher than in the waking state. But now, note a significant fact: If the sleeping person is a mother whose sick child is at her side or in the adjoining room, a cry or sound from the child, which is ever so much lighter than the various sounds coming from the street, or the talking and laughing of others in the adjoining rooms, etc., will wake her at once—at least such is frequently the case. We must not be too ready, then, to generalize by saying that all stimulus-thresholds are raised during sleep; we can only say that in general they are higher. It is probable that under certain conditions an individual may be actually more responsive or sensitive to particular classes of stimuli during sleep than he is during the waking state.

Not only is the sleeper less responsive in general to his surroundings than the wakeful person, but his sensitivity to stimuli varies greatly from time to time during the sleep-period. A number of investigators have endeavored to measure the depth of sleep for the different phases of the sleep-period in terms of the intensity of a particular stimulus required to wake the sleeper. De Sanctis and Neyroz<sup>1</sup> experimented upon four normal subjects over a period of six months, using as their measure or criterion pressure stimuli applied to the forehead of the subject. They found that their subjects reached the greatest depth of sleep during the second hour, after which the sleep

<sup>1</sup> Sanctis, S. de, and Neyroz, W., "Experimental Investigations Concerning the Depth of Sleep," *Psychological Review*, 1902, Vol. 9, pp. 254-282.

gradually became less profound till the usual time of awakening. In most of their subjects, however, there was a second phase of considerable depth during the fifth or sixth hour. In general their results are in agreement with those obtained by other investigators; but none of the studies has been sufficiently thorough and comprehensive to permit of generalizations. Obviously there are many difficulties to be met in the establishment of adequate controls in an experimental study of this kind.

But, although the burglar and the tardy husband might well consider the depth of sleep its most pertinent aspect, there are certain other features which promise greater interest to the psychologist. Certain of these features pertain, more strictly speaking, to the period immediately preceding or following sleep, the period when the individual is half asleep and half awake, so to speak, and which has been called the *sub-waking* or *hypnagogic* period. Dunlap suggests<sup>2</sup> that the most significant change that occurs with the approach of sleep is in respect to attention. It becomes increasingly difficult to sustain the attention with reference to any coherent or unified or coordinated type of activity, the attention and thinking tending to shift constantly to other things and from these to still others, making it extremely difficult, for instance, to solve a mathematical problem or to follow a logical discourse or argument. At the same time there is a narrowing of the range of attention. This is shown by the loss of efficiency in any complicated activity involving a wide range of attention (the unification of the different aspects of a situation and the rapid shifting of attention from one thing to another in a definite order), as, for

<sup>2</sup> Dunlap, K., "Sleep and Dreams," *Journal of Abnormal Psychology*, 1921, Vol. 16, pp. 197-209.

instance, driving an automobile through heavy traffic, playing a new and difficult selection on the piano, or even playing a game of bridge. On the other hand, if the activity is strongly habitual, well stereotyped, "sleepiness" has far less influence upon it. Thus one may undress, or recite a familiar poem, or do simple problems in multiplication without any great difficulty even though he is on the verge of sleep.

Other aspects of the hypnagoic period are brought out when we view it from an introspective angle. Perhaps the most marked change which the individual observes as he becomes sleepy—besides the "feeling of sleepiness" itself—is a loss of interest both with respect to the present and the future. We all know how interest and enthusiasm tend to lag upon the approach of sleep, and we know how difficult it is to elicit the sleepy person's interest in a projected outing, an approaching football game, or even in some event of international significance. At the same time sleep is not something which comes along and overrides the individual's interest and volition whether or no. It is a common fact that strong interest, once aroused, tends to inhibit sleep, the same being true of any strong emotion or feeling. Thus, sleep on the one hand and interest, anticipation, desire, emotion on the other hold a reciprocally antagonistic relation to each other; to the extent to which the one is aroused the other is typically inhibited or absent. Or, as McDougall expresses it: "The most important single condition of sleep is, perhaps, peace of mind."

Perhaps the "feeling of sleepiness" is nothing more than a sort of composite of these factors which we have mentioned and of certain others. The individual not only loses interest and finds it difficult to pay attention but there is also a definite positive tendency (inclination) to

ignore various types of stimuli, to assume a comfortable position, and even to avoid or withdraw from situations which are not conducive to sleep. We have often heard someone say, "Leave me alone, let me sleep," "I want to go to sleep," "Stop that noise, it keeps me awake," etc. If questioned, such a person will often emphatically state that he has a positive desire to sleep, that he has no interest at the time in anything else. On the physical side there is an inclination to yield to the force of gravity; the head begins to sag, the arms hang loosely at the sides, the tonicity of the musculature in general becomes lowered. This tendency toward a state of general relaxation is usually first experienced in the eyelids which become heavy and have a tendency to close. With the coming on of sleep, or a deeper stage of sleep, this tendency to relax gradually spreads throughout the body and we ordinarily find if we attempt to move the limbs of the sleeping person that there is no positive resistance. As the individual becomes more sleepy we note also a general loss of coördination in his movements; his walk is more awkward, skilled movements lose their smoothness and accuracy. We might say, from a physical point of view, that sleep is characterized by a condition of general incoördination or dissociation and greatly decreased innervation. Likewise we shall find that sleep when viewed from a mental or psychological point of view offers considerable evidence of being a condition of general dissociation. Finally we may mention that many of the bodily functions become altered during sleep: the pulse rate becomes slower, respiration becomes slower, blood pressure decreases, while on the other hand sleep is supposedly conducive to such processes as digestion and anabolism.

Certain other aspects of sleep will be mentioned in connection with various theories of sleep, which follow

topically, and in connection with the abnormal aspects of sleep and in our discussion of dreaming.

**Some Theories of Sleeping.** 1. *Physiological or Circulatory Theories of Sleep.* On the one hand it has been held that sleep is due to cerebral anemia, and on the other that it is due to cerebral hyperemia. The former theory appears to have met with the greater favor, being supported, according to its advocates, by the fairly well-established fact that during sleep there is a decrease in the blood pressure in the brain. But it has been suggested by Dunlap<sup>3</sup> that since the blood pressure throughout the body becomes less during sleep, it cannot be said *a priori* that there is a relative decrease in blood pressure in the brain. The blood vessels relax, and the heart beat becomes slower, with the result that the blood pressure becomes less generally.

But, even though it could be definitely established that there is relatively less blood in the brain during sleep, or, if the opposite of this were to become an unquestionable fact, we certainly should hesitate to accept it as an explanation of sleep. It would be quite as logical to explain sleep on the basis of the general muscular relaxation, or the slower respiration, or any other of the physical correlates of sleep.

2. *Histological or Neurodynamic Theories of Sleep.* Following the work of Golgi and Ramon y Cajal, establishing the independence and continuity of the neural elements, Cajal advanced the theory that the expansion and contraction of the neuroglia-cells gave rise to the appearance and disappearance of states of consciousness. Subsequently to this, Mathias-Duval advanced the hypothesis that sleep is due to the contraction of the protoplasmic processes of the neurones. This, of course, would widen the

<sup>3</sup> *Ibid.*

synapses and consequently (theoretically) make it more difficult for nervous excitations to pass from one neurone to the next. But unfortunately this rather ingenious theory has little if any experimental support. No one has ever observed the contraction of the neurone-processes during sleep, although it has long been known that changes of this sort follow long, continuous stimulation. But we must not be led to assume offhand that sleep necessarily involves changes similar to those found in conditions of over-fatigue, or other sleep-like states; much less that it is the result of such changes. Sleep, so far as is known, is as unlike certain other states of "unconsciousness" as it is unlike the waking state—perhaps more so.

Johnson proposes a somewhat different neurological theory of sleep, assuming the existence of a system of neurones which, when activated, bring about sleep. He says: "We would then say that the sleep mechanism is made up of neurones which one may call sleep neurones, just as we speak of motor neurones, and we would suppose that they possess the same general properties and in a general way obey the same laws as the other neurones. . . . In other words, the sleep neurones would inhibit other cortical neurones by the so-called drainage process."<sup>4</sup> This writer thinks it likely that the catabolic products in the body act as a stimulus to throw the sleep mechanism into operation, which not only drains off the excitation from the other cortical centers but whose excitations are conducted to the lower centers in the brain and the spinal cord. This latter fact, he assumes, may account for the organic changes during sleep and also for the fact that certain psychological factors are conducive to the approach of sleep.

<sup>4</sup> Johnson, G. T., "Sleep as a Specialized Function," *Journal of Abnormal and Social Psychology*, 1923, Vol. 18, pp. 88-96.

Apparently it is assumed to begin with that sleeping is a positive reaction, and this being the case it is necessary to postulate the existence of some mechanism for the execution of this reaction. But to assume a separate and distinct mechanism which functions only in relation to sleep is seriously to risk a violation of the law of parsimony. Neither does such a theory offer any satisfactory account of dreaming and the abnormalities of sleep.

3. *Chemical Theories of Sleep.* Early in the nineteenth century it was proposed by Marshall Hall that sleep is a kind of epilepsy. With much subsequent work in biochemistry and investigations into the nature and effects of toxicity, this chemical theory has been resuscitated under the guise of the auto-intoxication theory of sleep. It is assumed by Pryer that sleep is a condition of self-intoxication resulting from the toxic substances produced by the catabolic processes in the tissues. These toxins are supposed temporarily to put the brain centers out of order, thus bringing about a condition of insensibility and inactivity—a sort of mental and physical paralysis, as it were. A slightly different view, held by some, is that sleep is the result of the consumption of the intra-molecular oxygen in the brain tissue, leaving the nervous system less sensitive to stimulation.

There are certain very serious objections to these theories. For instance, they do not take adequate account of the fact that over-fatigue—an over-accumulation of toxins—frequently results in a state of sleeplessness instead of sleep. Nor do they account for the fact that many individuals sleep whenever they have nothing else to do, quite regardless of the time of day and the amount of sleep they have had. Moreover, one would expect the individual to return, necessarily, to a state of wakefulness as soon as the toxins had been practically eliminated or

more oxygen accumulated; whereas, in fact, many persons wake up on Sunday morning only to turn over and sleep several hours longer as soon as they recall the day of the week.

4. *Psychological Theories of Sleep*. Manaceine<sup>5</sup> "explains" sleep as being the resting time of consciousness—which Sidis says is only to point out a perfectly obvious fact. But Heubel<sup>6</sup> perhaps goes a step further in lending tenability to the psychological interpretation of sleep when he assumes that consciousness is dependent upon incoming peripheral stimulation, and that in the absence of such stimulation consciousness ceases. He points out that the individual goes about the exclusion of peripheral stimuli when he undresses, assumes a comfortable position, relaxes, turns out the light, and closes his eyes.

That psychological factors play a very significant rôle in the inducing of sleep in the case of the human adult can hardly be doubted; but in view of the fact that millions of people sleep nightly in the midst of distractions, we can hardly believe that the sole requisite for sleep is the elimination of peripheral stimulation. Or, if it is, then certainly we must assume that the elimination of peripheral stimulation is dependent upon some positive reaction of the individual other than merely a physical withdrawal from exciting factors. Neither are most psychologists inclined to take for granted that consciousness at any given moment is solely dependent upon peripheral stimulation; nor do they view sleep merely as a loss of consciousness.

Woolbert<sup>7</sup> attacks the problem from a purely be-

<sup>5</sup> Manaceine, Marie de, *Sleep: Its Physiology, Hygiene, etc.* Scribner.

<sup>6</sup> Heubel, "Abhängigkeit des wachen Gehirnzustandes von ausseren Erregungch," *Pflüger's Arch.*, XIV, 1877.

<sup>7</sup> Woolbert, C. H., "A Behavioristic Account of Sleep," *Psychological Review*, 1920, Vol. 27, pp. 420-428.

havioristic point of view. He assumes the neuro-musculature of the body to be arranged in a hierarchy of levels or systems. Those systems which develop earliest in the individual, such as respiration and circulation, are the most basic to life and are the most strongly established or integrated. At the other end of the scale are those systems concerned with speech and thinking, the functioning of which determines consciousness. In between are the systems concerned with the other everyday activities of the individual. Now sleep is merely a cessation of the functioning of the higher systems, and the depth of sleep depends upon how far down the scale the cessation of activity extends. In complete sleep the organism is under the dominance of the lowest systems.

The theory is perhaps as satisfactory as one would expect. Like any behavioristic concept it is merely a description, for the most part, of certain observable facts. We all know that along with sleep there is a cessation of most of the activities of the individual; but to identify this cessation of activity with sleep is hardly a justifiable procedure. Following out the theory logically leads its author to assert that sleep is impossible during widespread activity, such as walking, talking, etc. Yet we all know that it is not uncommon for individuals to talk during their sleep, or even to walk, to say nothing of that very interesting and often quite complex activity which we call dreaming.

5. *Biological Theories of Sleep.* Claparede was perhaps the first to advance a concisely formulated biological theory of sleep. He conceives of sleep as an instinct, an inherent, adaptive reaction of the individual to certain needs. Thus he says: "*Le sommeil n'est pas un état purement négatif, passif, il n'est pas la conséquence d'un simple arrêt de fonctionnement: il est une fonction positive, un acte*

*d'ordre réflexe, un instinct qui a pour but cet arrêt de fonctionnement; ce n'est pas parce que nous sommes intoxiqués, on épuisés, que nous dormons, mais nous dormons pour ne pour ne pas l'être.*"<sup>8</sup> The individual does not sleep, then, because of poisoning from toxic substances or because he is exhausted, but rather he sleeps in order not to become exhausted. In short, according to this view, sleep is a positive act, the purpose and result of which is to bring about a cessation of most of the functions of the individual.

The reader will observe at once that this view is fundamentally different from those which we have been discussing, and it is perhaps one which offers a better approach to an understanding of the true nature of sleep. But what evidence is there to support the view that sleep is an instinctive reaction?

First we have the fact that most, if not all, vertebrates sleep, *i.e.* more or less periodically assume a rest-state, become relaxed, inactive, and seemingly oblivious of their surroundings. Boris Sidis and others have made some very interesting studies of the rest-states of certain of the lower animals, human infants, and children. Sidis investigated various aspects of the rest-state in frogs, guinea-pigs, cats, dogs, human infants, and children.<sup>9</sup> He found that if he placed a frog on its back and held it there for a few minutes, restraining all movements, the frog's eyes soon closed, its body became semi-rigid and immobile, and he could hang it over the side of a glass jar and carry it around the laboratory without "waking" it. Along with the semi-rigidity or wax-like condition (catalepsy) of the muscles, the frog showed a tendency to maintain any position in which it was placed. In the guinea-pigs he observed quite

<sup>8</sup> Claparede, E., "Esquisse d'une théorie biologique du sommeil," *Arch. de Psychol.*, 1905, Vol. 4, pp. 245-349.

<sup>9</sup> Sidis, B., "An Experimental Study of Sleep," *Journal of Abnormal Psychology*, 1908, Vol. 3, pp. 1-32, 63-96, 170-207.

similar phenomena, although the cataleptic condition was less marked than in the frogs. On the other hand he discerned a more pronounced "sub-waking" (hypnoidal) state, *i.e.* a condition of apparent drowsiness or lethargy intervening between the sleeping and waking states. The cats (kittens) showed a still more marked hypnoidal state but not very marked catalepsy. In his experiments on the puppies he discovered that after the puppy had been "put to sleep" a number of times by wrapping a cloth around its body to curtail its movements, it was necessary merely to place the individual in the customary position to induce the sleep-state. If it were shortly aroused, it would appear sleepy and when left alone would soon relapse again into the sleep-state. During the hypnoidal state, or period between waking and sleeping, he was able to observe definite cataleptic conditions. He succeeded in inducing sleep in human infants of a few days of age simply by restraining all movements, while in children of nine he obtained cataleptic states, and hypnosis and fully developed hypnoidal states in children of thirteen. From his results, Sidis concludes that both sleep and hypnosis in human adults have developed or evolved from a hypnoidal or primitive rest-state similar to that found in many of the lower animals.

Whether we are inclined to agree with the particular conclusions drawn by Sidis, we can hardly deny that his work offers very strong evidence for a biological theory or concept of sleep in the human individual. Surely it is worthy of note that the child sleeps very soon after birth, certainly long before it can have become conditioned to various psychological factors. Therefore we can hardly consider sleep to be nothing more than a reaction to certain psychological factors, as some seem to do. At the same time we are in no sense forced to ignore or under-

estimate the significance of psychological factors in accepting the biological theory. Exactly what the nature of the stimuli is which calls forth the sleep-reaction in the infant is not known; it seems highly probable that they are principally of a chemical nature. But that the reaction should later become strongly conditioned to certain psychological factors is entirely in keeping with all facts relating to the conditioning of instinctive reactions.

Moreover, it might be pointed out that since man has not developed nocturnal vision, he has always been forced into a passive or quiescent state with the approach of darkness, since to venture forth would be to run into his foe, or walk off a precipice, or bump his head against a tree. (Of course it is but comparatively recently that man has enjoyed the advantages of artificial light.) Along with this enforced idleness at night we may perhaps assume that there has developed a periodicity of bodily functioning and an anabolic-catabolic relationship or ratio which is only sufficient to maintain the activities of the individual for a few hours at a time, except in case of extreme need when the reserve of energy may be called upon. Thus there has developed, in keeping with certain aspects of the environment, a tendency to relapse into a state of inactivity once in every twenty-four hours, which tendency has proved adaptive in sparing the individual possible risks and dangers which he would have inevitably encountered had he been wont to continue active after darkness had robbed him of his sense of vision.

In keeping with this we are led to infer that darkness, the exclusion of light stimuli, is one of the requisite and natural stimuli for the inducement of sleep. This condition of darkness is doubly assured by the preliminary reaction of closing the eyes, which is apparently common to all animals which sleep. We should further expect any

factor which has a restraining or inhibiting effect upon the voluntary movements of the individual to act as a sleep stimulus since general muscular inactivity is so invariably an aspect of the sleep-state. Thus, as some have pointed out, one may appreciably aid himself in going to sleep by voluntarily inhibiting all movements. Moreover, there are innumerable physical and psychological factors which tend either to inhibit or conduce to sleep, depending in part upon the previous experience and conditioning of the particular individual.

We may tentatively assume, then, that sleep is the expression of an innate reaction-tendency which has developed in relation to a certain aspect of the individual's environment. Furthermore, we must infer that there is a definite reaction-mechanism which is thrown into operation when the individual goes to sleep; although we need not assume the existence of a distinct and separate neuronic system which functions only during sleep. Finally, we may suggest as some of the many psychological factors which are instrumental in eliciting the sleep-reaction, the sight of the room where one customarily sleeps, an awareness of the approach of the usual time for going to sleep, others retiring, having nothing to do, finding one's self in a boresome or unpleasant situation, and, in many cases, the approach of darkness. In the lower animals as well as in man the tendency to sleep, at certain times and in certain situations, is expressed in part by the preparatory behavior which precedes sleep. The animal sniffs, walks around, seeks a comfortable place, and assumes the proper position for going to sleep; the man yawns, stretches, undresses, raises the window, turns off the light, goes to bed, and, perhaps, props his knees comfortably against his chin—and goes to sleep. That these reactions, in general, together with the relaxation of the

body, are primarily the expression of a definite positive tendency which to be elicited requires its own adequate stimuli is suggested, in part, by the easily observable fact that it is next to impossible completely to relax unless one is sleepy and desires to sleep. The reader may quickly test this out by trying to relax while sitting in a straight-backed chair and in a wakeful state. If he really succeeds, he will either slide out upon the floor or hang over the side as limp as a wet rag. On the other hand, if the sleep-reaction has already been aroused, it will be almost equally impossible for him to remain alert and to maintain an upright position.

**Some Abnormalities of Sleeping.** Having gone as far as we can at the present time in establishing the nature of sleep, the next matter of interest is the so-called abnormalities of sleep. Many of these, strictly speaking, are merely coincidental with sleep rather than true aspects of it. That is, certain mental reactions which are in themselves more or less abnormal, are more readily manifested during sleep than in the waking state for various reasons which will become clear as we proceed. We shall take up only the more significant of these reactions.

Perhaps the most common condition or reaction relative to sleep that can be considered abnormal is *insomnia* or *sleeplessness*. Insomnia may take one of several forms: one individual experiences a great deal of difficulty in going to sleep; a second individual complains of broken or fitful sleep, waking many times during the night without any very apparent cause; a third individual falls asleep soon after retiring only to wake up shortly and remain awake the rest of the night. In most of those who are troubled with insomnia, however, all these various forms are found.

The causes of insomnia may be arbitrarily divided into

two general classes, physical and mental. Of the first we shall say but little. Any kind of physical suffering—aches, pains, dizziness, nausea, etc.—is conducive to sleeplessness, as is well known. Certain drugs are sleep inhibiting, as well as lack of physical exercise, over-eating, and, frequently, over-fatigue.

From our point of view the mental causes are of more importance. These are legion and are always, apparently, of an emotional nature. It is a generally known fact that any strong emotion—fear, anger, anxiety, sex-excitement, horror, disgust, despair—are outstanding inhibitors of sleep. In this connection we might again recall McDougall's statement to the effect that peace of mind is perhaps one of the greatest requisites to sound sleep. Anything that tends to destroy one's peace of mind, whether it be strong anticipation of some future event that is of unusual interest, or a recent disappointment in domestic or business matters, or an unresolved state of anger or fear or excitement, prevents one from obtaining the necessary relaxation without which normal sleep is impossible.

Of less frequency are those cases of insomnia which result from some more or less permanent mental state or attitude such as fear or dread of going to sleep, or a persistent intense longing for some unacceptable or unattainable goal. Thus one person could not go to sleep because of anxiety lest he should commit some immoral or criminal act before waking; and another is obsessed by the belief that if she goes to sleep she will never wake. As somewhat similar to this last we may recall the patient in the mental hospital who spent most of her waking life seeking assurance from those about her that that day would not be her last—she had considerable difficulty in going to sleep at night. A third individual found it difficult

to sleep because he was constantly worrying or anxious lest some injury should befall his mother. An analysis revealed that he "subconsciously" wished that his mother might meet with some accident and thus free him from her too strict guardianship.

Mental conflict is a frequent inhibitor of sleep and the reader will recall that we mentioned insomnia as being a characteristic symptom of neurasthenia. Moreover we believe that insomnia, like many other mental symptoms, may be viewed as a defense or protective reaction. How often do we hear someone offer sleeplessness as an excuse for not doing better, say in an examination. True, he may not have slept well the night before, but he also may have got a certain satisfaction the night before from his anticipated sleeplessness. He may reason, "I am not going to sleep well and therefore I shall not do myself justice in the examination tomorrow." He thus provides himself beforehand with an excuse for not doing better. We have said before that the individual usually prefers believing that he cannot do something to knowing that he cannot do it.

Finally we may mention as a fairly frequent inhibitor of sleep excessive day-dreaming. Many individuals lie awake for hours after retiring, building "air-castles," not only unable to sleep but perhaps preferring their day-dreams to the sleep which they really need. In keeping with this cause of insomnia and certain of the other causes we have mentioned, we should expect insomnia to be more characteristic of the introvert than of the extrovert.

In contradistinction to the insomniac is the individual *who sleeps to an abnormal or unusual extent*, not including those persons troubled with "sleeping sickness" or some other chronic organic disorder. The inclination to sleep

too much, *i.e.* more than seems natural or necessary, can often be understood as a withdrawal or defense reaction to an uncongenial situation. Certain psychoanalysts carry this interpretation to an extreme, contending that sleep is not only a defense reaction but that it symbolizes in an active way the desire to return to the peace and security of the mother's body—they point to the fact that so many individuals assume a curled-up position in going to sleep. But it is unnecessary to go this far in order to view, as defense reactions, certain cases characterized by a disposition to sleep considerably more than is usual. For instance, note the following case. It is given in the words of a mother speaking of her small son.<sup>10</sup>

CASE 34. When Millard was four years old, he threw a piece of glass at a boy, and the boy happened to be what they call a "bleeder." I guess this frightened Millard nearly to death. Apparently no one saw him do it. He came into the house and said, "I'm tired; I want to go to sleep." I did not know, then, of course, what had happened, though he actually looked as though he would fall asleep then where he stood. He was always affected like that when he did anything wrong, and he actually would lie down anywhere, perhaps under the bed, and go to sleep at once, even with his hat and coat on. He always would sleep until I woke him for his next meal. Not infrequently I would be going around the house and find him asleep. Then I would know that he had done something wrong.

The same authors report a second case, that of a married man, in which sleep seemed to serve as a defense or escape reaction. Prior to his marriage, the subject had led a very active life quite unlike the monotonous routine of his post-marital existence. He habitually became sleepy early in the evening, *i.e.* about ten o'clock, and retired. But when his wife went on a vacation and he enjoyed

<sup>10</sup> Willey, M. M., and Rice, S. A., "The Psychic Utility of Sleep," *Journal of Abnormal Psychology* 1924, Vol. 19, pp. 174-178.

greater freedom—perhaps imaginary as well as real—he did not become sleepy until considerably later in the evening and he did not experience any need for more sleep. Under analysis he stated that since his marriage he had missed the excitement and freedom of his pre-marital life, that his life was very uninteresting, and that when evening drew on he became more and more sleepy until he could no longer keep his eyes open.

Cases similar to this one are not unusual. How often has the reader found himself almost overcome by sleepiness when he sat down to “cram” for an examination in an uninteresting subject? And how easy it is to become sleepy when asked to go somewhere in the evening if one does not wish to go. It is not an uncommon complaint among wives that their husbands are always too sleepy in the evenings to go calling. And there appears to be no good psychological reason why the sleep reaction might not become conditioned to almost any stimulus or situation and consequently occasionally appear in the rôle of a defense or escape reaction.

Mention has already been made of the fact that during sleep one is not necessarily equally immune to all stimuli, of the same intensity or even of the same mode. In other words, one may go to sleep “set to respond” to a certain type of stimuli, as when the mother reacts by waking to the cry of her child, or the fireman to the fire alarm, while stimuli of much greater intensity are unheeded. The intensity of the stimulus necessary for eliciting a response in such cases apparently need be no greater than in the waking state, and indeed it is probable that it need not be as intense. The nature of the mechanism underlying this interesting phenomenon—sometimes described as “sleeping with one eye open”—is by no means certainly understood. It may be observed that it operates in the

same manner as a "mental set" in the waking state, but this helps us very little to understand its nature. It has been suggested that the "subconscious" remains on guard during sleep, shunting all irrelevant stimuli to one side, as it were, but letting certain ones, because of their particular significance to the sleeper, enter consciousness and thus bring about an awakening. In the light of the psychological data we have at the present time, the notion seems a bit fantastic.

Closely related to the above phenomenon is that *peculiar ability which some individuals claim to possess of being able to wake at any hour that they may decide upon before going to sleep*. The reader should hesitate to give too much credence to such reports until they have been thoroughly substantiated. Certainly many persons do have little difficulty in arising at an earlier hour than is their habit, but often it will be found that they usually wake at such a time but either go to sleep again or lie in a half-wakeful state till their regular time for getting up. Certain experiments on such "human alarm clocks" have not resulted in any positive evidence, the subjects usually waking several times during the night. At the same time it would not bespeak a wholesome scientific attitude to deny outright that certain individuals are able to wake at approximately any time of the night they wish. After all, we may be dealing with nothing that is radically different from certain phenomena of waking life. It is a fact of daily observation that we perceive certain aspects of our environment not because we are looking for or expecting them but because of the particular meaning they have for us, as, for instance, the sailor who notices vague indications of a storm while ashore, or the mining engineer who observes the rock formations while wholeheartedly engaged in the pleasures of an outing trip.

Likewise it is conceivable that the sleeper, particularly toward morning when the depth of his sleep has materially decreased, might perceive certain obscure signs (especially sound stimuli), indicating the hour of the night, and that these might serve to arouse his pre-formed intention of getting up at the hour for which the sound stimuli stand. At least we should be inclined to exhaust the possibilities of some such interpretation before accepting the professed services of the "subconscious."

There are many reactions which, when they occur during sleep, are to be considered more or less abnormal. Among these are *talking and walking during sleep*. We believe that in all cases of this kind we are dealing with phenomena of mental dissociation. Studies of individuals who walk during their sleep have revealed that the walking is an expression of some quite definite motive and that there is mental activity of a distinctly purposive nature associated with it. One sleep-walker went to the bath room regularly every night in her sleep. An analysis of her case revealed that several years before, when she was a girl in her early teens, she had frequently gone to the bath room and left the door open in the hope that her brother, with whom she had been sexually intimate, would surprise her there. Hence in a very true sense her sleep-walking had a definite purpose and meaning. Another young woman while asleep told her friend of some very intimate family matters. Upon learning from her friend in the morning what she had said she was quite perturbed, feeling that she had compromised others. We know from our previous discussions that a complex mental system may function quite independently of the personality as a whole, and this is what appears to occur in the case of walking and talking during sleep. These facts together with others incline us to view sleep, psychologically, as a state of general dissocia-

tion, and our consideration of that most interesting and significant of all sleep-phenomena, dreaming, will lend support to this view.

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## CHAPTER XVI

### DREAMING

**On the History of Dreaming.** Unlike sleeping, dreaming has always aroused the interest and curiosity of man. Many ancient peoples believed dreams to be the visitations of foreign spirits during sleep, while others thought them to be the experiences of the soul which left the body during sleep and wandered to distant and strange places. Hippocrates (460-354 B.C.) was of the opinion that during sleep the soul hovered about the body, seeing, hearing, reflecting, grieving, and that upon waking such activities were recalled as dreams. Lucretius (98-55 B.C.) believed that the soul was made up of tiny particles, one from each cell of the body, which held the same relationship to each other as the corresponding cells; and that the soul was able to leave the body and to engage in various activities which for the body itself were impossible. The nocturnal activities of the soul while the body lay in slumber constituted and were remembered as dreams. Certain savage tribes are said to refrain from waking a sleeping person for fear of frightening the soul away; while many persons of our own time and civilization believe dreams are communications from a supernatural being, usually divine, and that they are to be interpreted as forebodings.

Thus if we search carefully enough, we shall find that in all ages and in all countries dreaming has incited the curiosity and stimulated the imagination of man. In many ages of the past, the interpreter has held a position of unusual respect, even reverence, in the eyes of his people,

and even today the self-styled prognosticator of dreams (or a reader of hands or heads) may easily occupy a position of some importance in the minds of the more ignorant. But with the rapid sweep of scientific thought and discovery and the development of means of quick communication, the problem of dreams and their interpretation became largely relegated by most thinking persons to the rubbish heap of man's outgrown past. In short, dreaming was not solved or even theoretically understood; it was simply discarded as a problem of little significance and unworthy of serious study. At least this was essentially the status of the dream-problem forty or fifty years ago, except for a few serious but spasmodic attempts to make sense out of what appeared to be utter nonsense.

Then an unusually venturesome Viennese psychiatrist, Sigmund Freud, undertook a serious study of dreams in connection with his observations and treatment of mental patients. And, although there were extant several dream theories at the time of Freud's advent into the psychology of dreaming, yet if one were to compare the dream literature of the forty years immediately preceding the publication of Freud's *Interpretation of Dreams* with that of the last forty years, he would inevitably conclude that the present widespread scientific interest in dreaming is primarily due to the impetus provided by this one writer. This implies, of course, that most of the present literature on dreaming is in some way definitely related to Freud's views, which is quite true.

But before considering Freud's or any other theory of dreams we must familiarize ourselves with some of the more important aspects of dreaming.

**How Much Do We Dream?** Dreaming may be briefly defined as mental activity during sleep; and it is generally assumed that it is an episodic phenomenon which may or

may not occur. In keeping with this assumption, much has been written about the frequency of dreams, their length, their relation to the depth of sleep and to the internal and external condition of the sleeper. But the bare fact of the matter is that the assumption that most sleep is dreamless, devoid of mental activity, an assumption which is so universally accepted as to be seldom questioned, is based entirely upon the fact of the individual's ability, or inability, to recall any dreams when he wakes. If the individual is unable to recall anything when he wakes, it is assumed that he did not dream, that he has nothing to recall. But a moment's reflection will convince one that such an assumption is really without the slightest factual basis to support it. On the other hand there are several bits of evidence which tend to support the view that mental activity is continuous from waking to sleeping and on to waking, that our mental activity is a true continuity.

*First*, if the individual's mental activity during his waking hours is a true causal sequence of events, strictly deterministic in nature, it appears hardly likely that this sequence comes to an end every time the individual goes to sleep and then begins again when he wakes. *Secondly*, if we had no other means of proving the continuity of mental activity during waking life than the individual's ability to recall at the end of each eight- or ten-hour period his different thoughts, desires, feelings, emotions, perceptions, etc., we should perhaps believe waking mental activity to be as episodic and intermittent as is generally assumed of mental activity during sleep (dreams). *Thirdly*, we find some evidence of the continuity of mental activity during sleep when we turn our attention to the subwaking or hypnagogic period. For some time after retiring—the time varying greatly for different individuals—one remains thoroughly alert and wide awake; he

is fully conscious of himself, of where he is and what is going on about him. But gradually consciousness of his physical surroundings and of himself fades away and he passes into a state akin to abstraction or reverie. Mental activity continues but a change occurs in what we might term the personal or "I" element; the mental activity of the individual ceases to have as a reference point either self, as self exists at the moment, or an aspect of the present objective situation. In short, among other things, the individual loses self-consciousness. If the individual is not disturbed, he will slowly pass into normal sleep which, as we said in the last chapter, is characterized by mental dissociation. But if we arouse the individual during the hypnagogic period, we learn of a very interesting fact: he reports that he was thinking, that his mind was active, as we say. Moreover, he will tell us that in a strict sense *he* was not thinking but rather that thinking seemed to be taking place quite without any participation or direction on his part. He may only vaguely recall what seems to him to have been a veritable host of thoughts, mental images, etc., all of which tended to fade away immediately upon his awakening. Had we not awakened him till morning, in all probability he would have been absolutely unable to recall even having had any thoughts during the hypnagogic period. And we may assume either that the mental activity characterizing the subwaking period comes to a stop as the individual passes into a deeper stage of sleep or that it continues throughout the night but for the most part is not recalled upon waking in the morning. The latter appears to be the more logical assumption.

*Fourthly*, de Sanctis and Neyroz <sup>1</sup> observed that certain

<sup>1</sup> Sanctis, S. de, and Neyroz, W., "Experimental Investigation Concerning the Depth of Sleep," *Psychol. Rev.*, 1902, Vol. 9, pp. 254-282.

of their subjects almost invariably reported when awakened that they had been dreaming. That the others did not does not necessarily mean that they had not been dreaming; it is equally probable that they simply failed to remember their dream-thoughts, due largely to the sudden shift in attention upon being awakened. *Finally*, we may mention the fact that some individuals report dreaming a great deal, while others say they never dream. It appears hardly likely that this is literally true. Perhaps the latter simply do not recall their dreams; we all know how readily we tend to forget our dreams.

The facts which we have cited are among the reasons which lead us to postulate a continuity of mental activity during sleep; and a dream is merely a phase of this continuity of activity. The reader must keep in mind, however, that neither this assumption nor the contrary one (that of sleep devoid of mental activity) has an adequate basis in established fact at the present time. The former assumption simply appears to be the more logical one in view of what facts we have.

Having postulated a continuity of mental activity during sleep, we are not concerned with accounting for dreaming but only with the nature of it. As in most phases of human psychology, we can best understand the phenomenon (dreaming) by observing it first in the child.

**Dreaming in Children.** At first glance there seems to be but little similarity between the dreams of the child of five or six and those of the adult. But in his rather thorough study of the dreams of children from five to fourteen, Kimmins<sup>2</sup> was able not only to discover certain fundamental similarities between the dreams of the younger and older person but also to trace certain changes which gradually occur as the child grows older. The dream of

<sup>2</sup> Kimmins, C. W., *Children's Dreams*. (London.)

the young child, like the mental activity and overt behavior of his waking life, is typically simple and direct. And one will invariably find that the chief apparent determining influence operative is some interest, desire, or emotion of waking life. Thus many of the dreams of young children can be adequately understood as simple imaginary wish fulfillments. They dream of great stores of candy and ice cream, of having new toys, of playing with their companions, of the return of an absent parent, etc. On the other hand, no insignificant part of the dreams of children of five and six are fear dreams—quite the contrary to wish-fulfillment dreams. Kimmins found this to be true in about twenty-five per cent of the cases, the fear stimulus most often being an old man. Since there is no apparent reason why the child should be inherently afraid of elderly men, we are led to assume that such dreams are the result of being frightened by old men or, perhaps more often, of repeated threats from the parents to give him to the “old man” if he isn’t good.

A very interesting feature of the child’s dream is the fact that he is usually the most active participant in the dream situation. In the dreams of older children and adults, the dreamer more often assumes a less active rôle, frequently being nothing more than a passive onlooker. That the young child should be active in his dream-thoughts is again entirely in keeping with the nature of his waking life. The child is impulsive, to perceive or think is to act; doing things, action, is the principal aspect of his waking life—thus in his dreams he is acting. But as the individual grows older he learns to inhibit many of his impulses, to think before acting, and along with this, thought itself becomes more and more an adequate means of expression in many situations. Moreover, his own particular relationship to his environment and to other

individuals becomes more clearly appreciated and consequently he comes to perceive himself as an aspect of the situation instead of the situation as an aspect of himself. This greater complexity of mental life is simply carried over into his dreams, with the result that he assumes a less dominant place, giving more nearly equal emphasis to others as to himself.

Young children are prone to confuse or mistake their dreams for waking reality. Thus, one little boy of six dreamed that someone had given him a threepenny piece and when he woke searched for it in bed. The older person has learned from experience of the very vivid nature of some dreams and consequently if he wakes with a very strong impression of some recent act or experience, he is inclined to doubt its reality and immediately ask himself if he only dreamed it. But even then we are not always sure at the moment whether a particularly vivid memory relates to a past experience of waking life or whether we merely dream it.

The dream of the child, and also that of the adult, almost invariably contains some element from the experience of the previous day, *i.e.* the day followed by the night of the dream. In fact, many dreams of children seem to be little else than an imaginary re-living of recent experiences, often with little or no change introduced. This is particularly apt to be the case where some emotion has been strongly aroused in connection with some unusual situation during the day.

Hand in hand with the ever-increasing complexity of the child's waking life, there goes an increasing complexity in his dream life. This increasing complexity of mental life manifests itself largely as a certain principle or mechanism which has long been recognized by general psychology and designated by various names; namely, it is

that principle whereby one experiential element may come to stand for one or several elements other than itself, either successively or simultaneously. In much of the literature dealing with dreams, it has been termed *symbolism*, and since this term has been both over-used and misused a great deal, it is essential that we make its exact meaning clear. Dunlap<sup>3</sup> says that anything which stands for anything not itself may be correctly termed a symbol of the latter. In other words, any two associated words, facts, events, objects stand in the relation to each other of symbol and thing symbolized for the person in whose experience they have been associated. Certain things are universally associated with certain other facts (things) and consequently stand out conspicuously in the mind of nearly everyone as symbols of the latter. Thus a flag is the symbol of a nation; a six-pointed star is a symbol of perfection; white is often a symbol of purity; red is frequently a symbol of passion; the Croix de Guerre is a symbol of courage. It becomes obvious at once that we do much of our thinking in terms of symbols. Art, literature, and science are full of symbols. Such is not the case, however, when we study the mental activity of the young child; it is only with age and experience that one thing may come to stand for something else—his mother's name or voice or walk for his mother, the word "apple" for a certain fruit, the term "son" or "daughter" for a certain definite relationship between two individuals.

This, then, is one of the chief differences to be found between the dreams of children and those of adults. In the child's dream, a dream-thought or memory-image stands for the object or thing with which it corresponds, whereas, in the adult's dream, a dream element may rep-

<sup>3</sup> Dunlap, K., "Sleep and Dreams," *Journal of Abnormal Psychology*, 1921, Vol. 16, pp. 197-209.

resent any one of many things, depending upon the individual's past experience or associations.

*In summing up our brief remarks on children's dreams,* we may say that they are primarily reproductions of past experiences, modified, elaborated, and recombined in accordance with the needs, the desires, and the understanding of the child. Or, if the individual's mind has been unduly occupied with worries, fears, or anxious anticipations, then these factors may so arouse, or be so aroused by, such thoughts during sleep as to give rise to fear or anxiety dreams. This gives us a reference point for a consideration of the dreams of adults; we should expect them also to be in some manner reflections of the individual's past experiences and his present desires, ambitions, worries, doubts, etc., but ever so much more complicated, with their elements intricately interwoven and often symbolically represented.

**Some Typical Adult Dreams.** The dreams of adults are as varied as experience itself, and it is therefore obviously impossible to classify or separate them according to types. At the same time there are certain more or less typical dreams which seem to be of universal occurrence. Of some of these we shall speak briefly, and what is said must be taken in a rather general sense. As we have just pointed out, a dream is determined by the particular past experience and training and the present motives and situation of the dreamer; and to presume to explain or interpret a specific dream offhand and without first knowing a great deal about the dreamer, is either to be grossly deceived or else to attempt to deceive someone else. This applies to dreams in general, not wholly, perhaps, to certain "typical" dreams, which we shall now discuss.

One of the commonest types of dreams is the *simple reproduction of a past experience*. Or perhaps it happens

to be an equally simple and concise imaginative production of an expected event. An example of the first would be a dream of taking an examination which had already been taken, and under essentially the same conditions as those of the dream. The explanation of this type of dream is obscure. Perhaps it is due to some inherent tendency in man to repeat himself; as, when the child, not being satisfied with saying *da*, says *da da da da da da* until one wonders if he will never stop. In certain cases such dreams are undoubtedly due to repression, to an inadequate expression of emotion or impulse at the time of the actual experience. Many of the battle-dreams of soldiers would seem to belong here. Freud interprets certain types of reproduction dreams as symbolical representations of some impending difficulty which, the dream implies, will be met successfully just as the past situation has been.<sup>4</sup>

*Dreams concerning events which have not occurred at the time but which do take place later* have led to much speculation and to certain unwarranted conclusions held by many. That one may sometimes correctly surmise in his dreams the occurrence of a certain future event, his conjecture being based upon a knowledge of certain present facts, is undoubtedly true. There is no obvious reason why he should not occasionally do this in his dreams just as he does it every day of his life in his waking state. But that the dream is ever a prognosticator of events of personal fortunes, good or bad, in terms of anything else than the factual knowledge which the dreamer possesses at the time, is highly untenable in the light of all known facts. On every hand we hear of instances of an individual dreaming about something which later happened just as he had dreamed it; and such cases are cited by many sincere persons as evidence that the dream in some mysterious

<sup>4</sup> Freud, S., *The Interpretation of Dreams*. Macmillan.

way foretells future happenings. To take a specific example: Recently a young woman dreamed that her mother received a letter from one of her several daughters (*i.e.* a sister of the dreamer). She told the dream at breakfast and shortly afterward a letter arrived from the person in her dream. Now, how do you explain that, the writer was asked. Not so difficult to account for in the light of certain definite facts. The young woman readily admitted that she had dreamed of hundreds, perhaps thousands, of events which had never happened afterward, so far as she knew. On the other hand she was able to recall but one or two of her own dreams which had "come true." Moreover, she knew that it was likely that her mother should receive such a letter almost any time and, we may assume, just as she might have entertained a thought during her waking state of her mother's receiving a letter, she had the thought during sleep, which, like most dream-thoughts, was accepted as being true. In other words, the two phenomena, the dream and the arrival of the letter, were merely coincidental.

It is highly probable that all dreams of the above nature are to be explained in essentially the same way. True, some of them seem extremely baffling, simply because one does not have at hand all the necessary facts. But one should not feel called upon to interpret or explain any isolated phenomenon; an event becomes tangible only when the various aspects of the situation in which it occurred are known. Too frequently the individual who has one of these *prophetic dreams* is so eager in his desire to baffle the person he asks to explain it that he offers very little assistance by way of recalling related or significant facts.

*Kinesthetic dreams* or dreams of levitation, flying, falling, etc., have always excited considerable interest and

comment. As the name indicates, the kinesthetic senses (muscle, tendon, and joint) are assumed to play a prominent part in the determination of such dreams. Kimmins found in his studies of the dreams of children only very few dreams of this nature up to the age of ten, after which they became quite frequent. And correlated with this observation is the long-standing contention made by certain ones that at about the age of ten or eleven the individual tends largely to relinquish visual imagery in favor of the verbal and kinesthetic modes. But the extent to which peripheral stimulation (or sensations and perceptions) determines the trend and content of a dream, any dream, is still a highly debatable question. Horton,<sup>5</sup> for instance, believes the flying-dream to be conditioned or stimulated by respiration. Thus, the subject dreams he is soaring up and down because of the rhythmical rise and fall of the chest in breathing. Without denying that such a factor may be active in the flying-dream, we may still question it as a wholly adequate explanation. The observations reported by Mrs. Arnold-Forster<sup>6</sup> on her own dreams of flying suggest that such dreams may readily become the vehicle or nucleus of a very rich and varied mental activity. In the beginning, she tells us, she remained very close to the ground and flew only short distances at a time, but later she acquired more courage and also the ways and means of flying at any height and for any distance she desired. Gradually her flying-dreams became a very elaborate and fundamental aspect of her dream-life, and one from which she derived a great deal of pleasure. If, in the beginning, they were simple mental reactions conditioned by physiological changes of a specific sort, certainly in the end they became a very elaborate mental system or structure.

<sup>5</sup> Horton, L. H., "How 'Stimulus and Reaction' Explains Levitation Dreams," *Journal of Abnormal Psychology*, 1920, Vol. 15, pp. 11-35.

<sup>6</sup> Arnold-Forster, Mary, *Studies in Dreams*. Macmillan.

A rather ingenious but untenable explanation of kinesthetic dreams that has been offered is to the effect that upon going to bed the pressure sensations from the feet and legs cease, with the result that the individual experiences no physical support and thus seems to be flying or falling or merely floating in the air. The fact seems to have been largely overlooked that, in lying down, pressure sensations are quite as noticeable as in standing or sitting. Moreover, we all lie for some time before we walk or stand, to say nothing of the fact that we continue to assume a horizontal position every day throughout life, and certainly should early become adapted to changes in bodily position and the resultant changes in localization of pressure sensations. On the other hand, if we assume a complete adaptation to pressure stimuli along the back or sides after going to bed, we should always dream of being in the air (*i.e.* without physical support) whenever the "dream-consciousness" relates to physical position. Also, there seems to be some evidence that it is unusual, rather than customary, peripheral stimuli that may be influential in determining the content of the dream.

The fact that slow anesthetization or an over-dose of alcohol gives one the impression of being without physical support, *i.e.* the sensation of floating in air, has been advanced in support of the above explanation of kinesthetic dreams. But it is quite probable that factors other than the loss of kinesthetic and tactual sensitivity enter into these vague impressions produced by ether or alcohol. At any rate it is unsafe to reason directly from the effects of drugs to certain seemingly analogous conditions of normal sleep.

*Dreams of frustrated effort* are not uncommon, particularly among certain types of neurotic patients. Apparently the dream may relate to essentially any kind

of situation whatever which involves effort or initiative in the dreamer. One may dream that he is hurrying to catch a train or keep an appointment and that everything goes wrong; he is unable to get his handbag closed, or find his hat, or he discovers that his way is blocked by traffic. One of the writer's patients, a decidedly neurotic young woman, dreamed that she was leaving her house with a friend. They came to a low picket fence surrounding the house and her escort proffered her his assistance. She refused only to find that she was unable to get over the fence without help. The same individual dreamed at another time that someone wished to talk to her over the telephone, but when she took hold of the receiver she was barely able to lift it to her ear. Various explanations have been offered for dreams of this nature, one being that they are due to an inhibition of movement during sleep, as, for instance, having an arm in a cramped position under the body or getting the feet entangled in the bed clothing. A truer and more complete explanation of many of them would seem to lie in a feeling of inadequacy or inferiority in the waking life of the individual. The two dreams above seemed particularly well adapted to such an interpretation in view of the writer's knowledge of the young woman. Or, in the more normal individual, it is quite possible that such dreams are sometimes motivated by the fact of some premeditated undertaking, concerning the successful outcome of which the person has considerable doubt and anxiety.

*Dreams of being nude* or only partially clothed have created much interest. Again we are offered the explanation which is based upon peripheral stimulation. An arm or a leg becomes exposed during sleep and the individual dreams that he is nude or without adequate clothing. Such an explanation would be more tenable were it not for the

fact that the dream is almost invariably given a social setting; the individual dreams that others are present. Another interesting aspect of such dreams is the frequency with which they are accompanied by little or no embarrassment on the part of the dreamer. Moreover, the dreamer often reports that others seem to pay scant attention to his lack of clothing. In view of these facts, certain theorists have interpreted such dreams as symbolic representations of a wish to ignore conventionalities, to do as one pleases, and not be ridiculed by others. But it seems that a dream of this sort might just as likely symbolize the loss of one's fortune, or social standing, or even the loss of a very dear friend or relative; unless we care to assume that all dreams are expressions of wishes or desires. Still another explanation (strictly Freudian) is to the effect that the dream of nakedness is the expression of a repressed exhibitionistic tendency or desire; contending, as he does, that we are all possessed of such an instinct or tendency in infancy. Normally, this tendency to exhibit or expose one's self becomes integrated or incorporated with those other tendencies which comprise the sex group of instincts; and then manifests itself in socially acceptable ways and in connection with the others. But, if for some reason or other the tendency is not properly integrated with the others or is over-developed, it may express itself during sleep by means of dreams of nakedness. The reader will be in a better position to judge of the validity of such a view after we have discussed Freud's general theory of dreams.

*Dreams of dead friends or relatives* are fairly common. Frequently, the impression is created in the dream that the person has returned to life or else that he never died in the first place. Ellis<sup>7</sup> accounts for this interesting fact

<sup>7</sup> Ellis, H., *The World of Dreams*. Houghton, Mifflin.

by assuming that the dream is the result of two streams of reminiscences coming together, the one representing the individual as living, the other as dead. Since in general what is dreamed is accepted by the dreamer as being true, there results a confusion and an attempt to explain the inconsistency. This can be done by concluding (in the dream) either that the person did not die or that he has returned to life.

Quite different from the type of dream just discussed is that of the *death of a friend or relative who is living*. It seems that such dreams might be accounted for, at least in part, by a state of anxiety or by a strong desire or wish, usually repressed. It is not inconceivable that an anxious mother should dream of the death of her son or daughter, particularly if the latter happens to be ill at the time or exposed to some danger. But all dreams of this nature do not seem to be open to such an interpretation; in fact, certain of them point quite strongly to a wish of the dreamer that the other person might die. Thus, a son may dream of the death of his mother who stands in the way of his doing what he wants to do; a brother may dream of the death of his sister who is to share the family fortune with him; or a husband may dream of the death of his wife who stands in the way of his having some other woman. The child often expresses a wish that some member of the family were dead, although death may have no other significance for him than the elimination of the individual from the family circle—but we should not forget that the child is notoriously frank as compared to us adults. How often does someone draw a long sigh of relief at the death of an aged or infirm relative! The writer (and likely the reader too) has witnessed undeniably happy faces around the coffin of a dead relative. One mother of a large family complained to a social worker that she never had any

graveyard luck. But usually it is hard to be frank about such things—except in one's dreams, and perhaps not always then.

**Some Common Aspects of Dreaming.** To about the same extent that we may legitimately speak of typical dreams, we may also speak of common characteristics of dreams (dreaming). But here we must be even more careful about generalizing. It seems safe to say that there is not a single absolutely essential attribute of all dreams, a feature or aspect that must always be present. For instance, as we know, visual imagery predominates in the dreams of most of us; but in many dreams some other form of imagery is the mode, while in still others visual imagery is wholly absent, as in the dreams of the blind. Again, it is quite the rule for the dreamer to accept what he dreams as true; but, on the other hand, in a minor percentage of our dreams we dream that we are dreaming. Or, we might take that extremely common aspect of the dream, its bizarre or phantastic nature. The dreamer does not hesitate to fly about without wings or hold conversation with a dog or go to Heaven and meet with a grand reception by St. Peter. But once again we meet with the exception, the dream that has nothing of the absurd about it and conforms with true exactness to all the impositions of reality. Poetry has been written during sleep and difficult problems solved, to say nothing of all those cases in which the dream is little else than a simple reproduction of waking experience.

Yet, some one or other of the more common aspects of dreams has been made, in part, the bases for various general theories or explanations. It would be beyond the scope and beside the purpose of the present text to give all the different theories of dreams which have been offered from time to time; consequently only certain of

the more important ones will be considered. These follow topically.

**Some Theories of Dreaming.** 1. *The Perception-Illusion Theory of Dreams.* This is one of the older and more conservative dream theories. It assumes that the dream is a response to various stimuli which are acting upon the individual during sleep. The perception of the stimulus does not lead to the normal or logical associations since (it is assumed) the association tracts are partially blocked during sleep. This leads the mental processes (nerve impulses) to pursue the paths of least resistance, resulting in such associations as are determined by the factors of recency, frequency, and intensity of past waking experiences. In short, the dream is a free association process, undirected by any interest or "mental set" and unchecked by any awareness of the physical world. In this way the absurd and fantastic nature of dreams is explained. According to this theory, the dream is essentially as meaningless and incoherent as it seems to be.

Such a theory is supported to a certain definite extent by experimental data. It is extremely important, however, that we realize to just what extent it is supported. It has long been known that peripheral stimulation influences the content of dreams. Take, for instance, the case of the individual who dreamed that a mask of tar was being pulled from his face, taking the skin with it, when in fact a very light object was drawn across his face. The relation of the peripheral stimulus to the dream-content seems obvious; but to assume that it was the sole or even the chief determiner of the particular trend of the dream is to go much further than the facts warrant. The relative significance or emphasis which we give peripheral stimulation as a determinant of dreams depends largely upon whether we assume dreaming to be continuous during sleep

or only episodic. It will be recalled that we made the former assumption in the beginning of our discussion and in keeping with this we can give peripheral stimulation, *i.e.* sensory perception, only a secondary place in the determination of dreams (dreaming). In other words, perceptions during sleep may, and undeniably often do, enter into the content of the dream, influencing both its particular course and frequently its vividness. But it is not only possible but highly probable that there is a far more fundamental directing or determining agency back of the dream than sensory perception. And if so, then the perception of sensory facts becomes correspondingly insignificant and the illusory (or hallucinatory) nature of dreams itself takes on a greater significance.

Moreover, those theorists who have held to the view that the dream is primarily a misperception or illusion, have utterly failed to offer any adequate explanation of many dream-facts. Why, for instance, should the stimulus be so grossly misinterpreted or distorted? An individual who has experienced light tactual stimulations about his face throughout his life dreams, upon his face being lightly stimulated, that the skin is being torn away. Another individual dreams that he is drinking wine with some friends on a very hot day when a few drops of cold water are sprinkled on his face or forehead. And what might be the nature of the stimuli that led the mother to dream her son had been killed, or that resulted in the solution of a problem that the individual was unable to solve in his waking life? It is particularly this wide incongruity between the stimuli and the dream-content that the above theory does not account for. In keeping not only with psychology but with all science, we must assume a strict quantitative determinism, *i.e.* that no result is greater than the factors or forces which give rise to it. Consequently, if lightly tickling one's

face is followed by his dreaming of severe pain, we must assume factors at work other than the mere perception of the tactual stimulus.

2. *The Dream as an "Apperceptive Trial and Error" Process or Series of Attempts to Interpret a Stimulus.*<sup>8</sup> This theory likewise assumes that the dream is a response to a peripheral stimulus. But it goes further and conceives the dream as an attempt to interpret the stimulus. The exact nature of the mechanism which is postulated by the author of this theory is a bit vague. It seems necessary to suppose that there is an unlimited number of "ideas" residing somewhere in the "subconscious," or at least they are not in consciousness. These "ideas" are possible solutions or interpretations of the stimulus. One after another is tried, only to be rejected as inappropriate. This gives the dream its ever-changing and incoherent nature. A completely successful attempt, *i.e.* a completely correct interpretation, results in, or means, a full awakening—but why, is not clear.

Practically the same objections may be made to this theory as were directed against the one above. Moreover, it presupposes an inclination or need on the part of the individual to interpret every stimulus perceived during sleep. That this is the case seems to be supported by little or no factual basis. Certainly it is not true of the individual during his waking state that he attempts to interpret all the various visual, auditory, tactual, and other stimuli which are acting upon him; or if he does it is in a very vague and uncertain manner.

3. *Freud's Theory of Dreams.* In taking up Freud's theory of dreams, the reader must prepare himself not only for an entirely different viewpoint but also to grapple

<sup>8</sup> Horton, L. H., "Scientific Method in the Interpretation of Dreams, with a Theory to Explain the Dream-Process as Apperceptive Trial-and-Error," *Journal of Abnormal Psychology*, 1916, Vol. 10, pp. 369-396.

with a new terminology and a generous supply of concepts and sub-concepts. To begin with, it might be well to recall the tripartite division of mind which Freud makes, and to point out briefly certain relationships.

At birth there is little or no mental content that can be said to be conscious. The individual consists, on the one hand, of a group or several groups of drives, tendencies, or instincts, and various mechanisms through which these tendencies may realize or express themselves; and on the other hand of his sensory or perceptual equipment. The nature of the child is activity, to react to the world about him; and he does this in the beginning on a purely instinctive level. Along with his reactions to his environment he perceives, that is, obtains impressions through the medium of his various senses of the different aspects of his environment. These impressions or experiences are preserved and constitute the ever-increasing content of the preconscious system or aspect of mind. These memory-traces or experience-residues are readily accessible to consciousness, that is, the individual is able to recall them at will in his thinking and general activity. The conscious aspect or division of mind is simply that of which the individual is conscious at any given moment, the truly conscious processes, in other words. Thus it will be seen that there is a ready and continuous exchange of material between the conscious and preconscious; what is conscious one moment has passed out of mind the next and a new perception or the recall of a past experience has taken its place.

Very early in the child's life his energies or tendencies (sexual) become directed or attached to some object in his environment, usually the parent of opposite sex. He then behaves toward this parent in a truly sexual manner, broadly speaking. He (if the child is a boy) demands the

caresses of his mother, wants to be near her, seeks to keep her attention on himself, and becomes jealous of others for whom she shows affection. This early sexual attachment of the child to one of his parents is called, after the myth of *Œdipus Rex* who slew his father and married his mother, the *Œdipus Complex*.

As the child grows older, a strong incompatibility arises between his sexual feelings for his mother (it may be either parent) and his developing sense of propriety, his moral sentiments or ideals. This most often results in a repression of his sexual feelings toward his mother and an extremely strong identification with his father. That is, he accepts his father as model or ideal and straightway endeavors to become as much like him as possible, assuming his mannerisms, copying his actions, etc. The child then has a truly moral self, which acts as an inhibitor and repressing agent toward all wishes, desires, or tendencies which are incompatible with it. This not only serves to keep the *Œdipus Complex* from becoming conscious (having already been repressed) but forces down into the unconscious, so to speak, all subsequent incompatible wishes or impulses. Thus the unconscious, like the pre-conscious, continues to expand because of the new material that is added to it from time to time.

From this we may see that there are two aspects or kinds of material, as it were, to the unconscious. First, there exist those tendencies or instincts which are unconscious to begin with and can become conscious only by becoming clothed in or related to conscious perceptual elements (verbalized, the behaviorist would say); and, secondly, there are all those wishes or impulses which have been repressed after becoming conscious. But from the most significant and fundamental standpoint there is little difference between these two aspects; for it is the

nature of any tendency or instinct, whether it has ever become conscious or not, to express itself, to find realization.

We are now in a better position to understand Freud's theory of dreams. As has been pointed out in another place, it is the group of sexual instincts that constitute the chief and primary motivating principle of behavior; it is these that come into conflict with the moral standards, and consequently it is these that are repressed. Or, to speak more accurately, it is particular manifestations of them, together with the memory-traces of the perceptual elements which belonged with these manifestations, that are repressed. But repression does not in any sense destroy or eliminate them; it merely results in their being ousted from the conscious and preconscious systems and consequently denied their original form of conscious expression. They continue active, dynamic, striving for expression. At night the repressing agency (the nature of which is not clear, except that it is in some way tied up with the preconscious and conscious systems) goes half-asleep and the repressed sexual wishes are able to partially express or manifest themselves as dreams. The dream, then, is *an imaginary fulfillment of a repressed sexual wish*.

But even with the moral nature of the individual asleep and the protector of this moral nature (mentioned a great deal in Freud's earlier writings as the *censor*) half-asleep, it would still be impossible for the repressed wish to come into consciousness in its true form without shocking and waking the sleeper; and dreams, Freud says, are protectors and not disturbers of sleep. Thus, in order to realize itself, the repressed wish must comply with certain requisites which are automatically imposed by the fact of the existence of the censor. These requisites are met by means of *symbolization* and *distortion* of the true or *latent*

content of the dream. In short, the dream appears in consciousness in a disguised form, having thereby deceived the censor and in turn resulting in no disturbance of consciousness (the sleeper). The ways and means whereby the disguise of the latent content is brought about are termed the *mechanisms of dream formation*. It is obvious, then, that one must distinguish between the true meaning of the dream or its latent content and its apparent meaning or *manifest content*. A brief discussion of the principal mechanisms of dream formation will help to make clear some of the relationships which exist between the latent and the manifest content.

Condensation: A single element in the manifest content may represent a number of elements (wishes or wish-objects) in the latent content. A fairly common example of this is to be found in the dream in which an individual possesses the composite features of several individuals. This is supposed to be due to *over-determination* of the dream image. That is, since there are many repressed wishes seeking expression, several may become attached, so to speak, to the same image or thought. But they all retain, to a certain extent, their individual identity, which results in a composite rather than a unified image.

Displacement: An affect or emotion often becomes displaced from an important to an unimportant element of the dream. This contributes very largely to the disguise of the true meaning of the dream and gives rise to much of the nonsensical and bizarre character of the manifest content. Frequently displacement is carried to the extent of an element in the latent content being represented through its opposite in the manifest content. In other words, the dream, or certain elements in it, may imply or represent an opposite meaning or significance. An example would be to dream of extreme kindness to a cer-

tain individual, which would represent a strong dislike or desire to injure the person. Such a dislike, of course, would be unconscious. Displacement takes varied and interesting directions, but the *purpose* is always the same; namely, to permit an unconscious wish to find expression without resulting in a shock to the moral nature of the individual.

**Dramatization and Visualization:** These are quite different from the two mechanisms described above; they have a different basis. We are all aware of the fact that the majority of our dreams are expressed in visual imagery and in addition to this they are little life-dramas; they are the enactment of thoughts, purposes, desires. Dramatization of the dream is to be understood in relation to wishes or desires on the one hand and on the other to the oldest and most common mode of expression of such; that is, to overt behavior. Hence, in the dream the individual lives out or expresses in an overt manner, albeit symbolically and imaginatively, some one or several repressed wishes. The matter of visualization is explained as being a regressive phenomenon. Not only do most dreams involve one or more repressed infantile wishes, but in dreaming the individual regresses or goes back to an early level or mode of thinking, *i.e.* he thinks (or dreams) in terms of pictures (visual images). Although this, and also dramatization, result more or less in a greater distortion or disguise of the true meaning of the dream, such is not their *raison d'être*; they result, rather, from the general nature of the dream mechanism.

**Secondary Elaboration:** A repressed wish must be thought of as an abstraction which can be made concrete only by being represented by some conscious element or mental process, very much, so to speak, as we may say the ether becomes manifest only as light, heat, or as some other tangible or experiential fact. The wish becomes

conscious through the mechanism of visualization; a series of visual images symbolically represents the activity whereby the wish becomes imaginatively realized or expressed. But, upon coming into consciousness, the series of images or pictures usually appears incomplete and incoherent. Consequently elements from the preconscious are fitted into the skeletal dream-construction in order to give it unity, coherency, and meaning. This filling-in process is called *secondary elaboration*. It is identical with the tendency in waking life to subjectively supply the missing parts in a pattern, or to complete the half-expressed thought of another person as in interpreting a telegram or failing to notice the misspelling of a word in a line of print.

Symbolization: This is not, strictly speaking, a dream mechanism; or perhaps it would be better to say that it is not limited to dreams. It is a characteristic or mode of thinking, both in our dreams and waking life. But in dreaming it takes on a particular significance, for it is primarily through the mechanism of symbolic thinking or expression that the repressed wish may become consciously realized. It is conceivable that the young man, desirous of attending college but lacking the necessary funds, *unconsciously* wishes therefore that his younger brothers and sisters were out of the way that he might have a larger share of the family income for his own use. But the desire for the death of his siblings cannot find conscious expression as such because it is incompatible with his moral nature. So in his sleep he dreams of destroying vermin, obnoxious small animals, which, although it might cause him a certain amount of horror and disgust in his dream, is not highly contrary to his morals. The vermin having symbolically represented his brothers and sisters, his unconscious wish is gratified when he dreams of destroying them.

But if the manifest content of the dream, that which is

recalled upon waking, is a distorted symbolical representation of the true content or meaning, how is one ever to determine the latter? The possibility of our doing this rests upon two sets of facts, the first of which is *universal symbols*. Most Freudians contend that there are certain elements which frequently appear in the manifest content of dreams, particularly in the dreams of mental patients, and that these elements almost invariably stand for or symbolize certain other elements which always belong to the latent content. However, for the most part this conviction of the Freudians has been expressed in general terms rather than specifically. In other words, they speak of classes of objects, events, or experiences as having fairly definite symbolic meanings rather than implying that any specific object always has a certain meaning. Thus, small animals, insects, etc., usually represent brothers and sisters; God, kings, and superior persons in general stand for a parent (or the parents); long objects represent the male genitals, hollow objects or containers the female genitals; going on a journey stands for death; a house usually stands for a man or woman, depending on its structure. Such symbols, when they appear in the dream, may be taken as a starting point in the interpretation, but they have no great deal of significance unless they are followed up by the basic and essential technique of Freudian dream interpretation.

The only sure and accurate method of arriving at the true meaning of a dream, according to Freud, is by obtaining the individual's free associations to the different elements in the manifest content and by studying his past life (experiences). This is based upon the assumption that our free associations are involved with an absolute determinism; and that our thoughts, in the absence of any purpose or mental set, are not mere chance affairs nor are they determined by the intensity, recency, and frequency of our

experiences but that they are determined, like our dreams, by repressed wishes or complexes. Thus to the extent that it is possible to get true free associations to the different elements in the dream—and this is not always easy, because of the resistance due to the “censor”—these associations or thoughts will lead back to the repressed wish which motivated the dream. In this way it is possible to establish the true meaning of the dream.

To sum up briefly Freud's theory of dreams: Repressions occur due to a conflict between the sex instincts on the one hand and the moral nature or Ego-instincts on the other. Having been repressed, the sex wish or impulse is unable to gain conscious expression in its true form because of the censor, which is to be thought of as a resistance emanating or arising from the Ego-instincts (or, in more common terms, the individual's moral sentiments) and opposed to the conscious expression of all repressed material. Since the repressed wishes cannot, ordinarily, overcome the resistance to them, they must in some way avoid it if they are to gain control of the motor mechanisms of the individual and thereby become realized. Motility, Freud says, is typically under the control of, or a function of, the conscious system; hence the necessity of the repressed wish becoming in some way conscious if it is to gain expression. As we have seen, it succeeds often in becoming conscious not in its true form but in a disguised and symbolical form by means of the mechanisms of dream formation mentioned above. But dreams are but one instance of the expression of repressed wishes; others being day-dreaming or autistic thinking, slips of the tongue and pen, symptoms of mental disorders, and even much of the socially acceptable activity of our everyday life, particularly in art and literature.

Much criticism has been directed against Freud's theo-

ries, both from scientific and lay quarters. But up to the present time they have been neither proved nor disproved by careful experimental work. This is perhaps largely due to the relative inaccessibility of many aspects of his theories to truly experimental methods. Incidentally, no insignificant part of these criticisms is quite as much in support of his contentions as it is against them. For instance, it was early pointed out that if the subject (or patient) merely gives his free associations to the elements in a day-dream, or even to a "dream" deliberately manufactured, these are quite as apt to lead to material of a sexual significance as his associations to the elements in a nocturnal dream. But Freud, it must be understood, makes no fundamental distinction between nocturnal dreams and day-dreams, reveries, or even free-association itself. Hence one would expect any sequence of thoughts or mental pictures which is undirected to lead to unconscious material since all such mental activity is presumably motivated by repressed wishes.

The matter of symbolism, particularly of universal symbols, has called forth much harsh criticism. But it must not be supposed that Freud or his followers have arbitrarily assigned certain meanings to certain dream elements or thoughts. Symbolic meanings have been arrived at in two general ways: first, by a study of the mythology of past epochs in man's civilization, many of the myths having come down to us through literature and everyday expressions, superstitions, and ways of thinking; and secondly, by a study of the free associations of patients and normal individuals to their own dreams. Unfortunately, no exhaustive study of a statistical nature has been made on the symbolic meaning of dreams as revealed by the free associations in the waking state. Only future studies can adequately clarify this question.

4. *Autosymbolic Theories of Dreams.* C. G. Jung, an early supporter of most of Freud's doctrines but who has since developed a system of "metapsychology" more or less divergent from the Freudian view, sees in the dream an expression of a conflict between two basic trends in the individual. Jung postulates a single general motivating principle (the libido) which may take either a progressive or regressive trend. When it is expressed as purposive or reality thinking, that is, by thinking and reacting in an adaptive way to the world of reality, the libido is following the progressive trend. But it may quite as readily follow the regressive trend, in which case it is expressed as autistic thinking or dreaming (either nocturnal or day-dreaming) and in regressive overt activity. Particularly does the libido tend to take the regressive course whenever it fails to find an adequate outlet in the direction of adaptive thinking and behavior. Since everyone has his ups and downs, it is inevitable, according to Jung, that more or less conflict should arise between the opposite trends of the libido, the opposite modes of expression. Thus when a wish is kept from expressing itself in overt behavior, in an active and progressive fashion, and becomes repressed, it reverts or regresses to older, more infantile and primitive modes of expression. The dream is a common example of this. Thus in a certain sense the dream may be viewed as an attempted solution of a present difficulty.

Jung extends the meaning and importance of the unconscious considerably beyond the early Freudian view. Not only do we each have an individual or personal unconscious but we also have a *collective unconscious* which is an inheritance from the past of the race. This simply means that in certain universally common situations we tend to think in certain ways and in terms of certain symbolic meanings. In our dreams we frequently fall back

upon these primitive modes of thought and preëstablished meaning relationships. Thus there is said to be a close relationship between the latent meaning or content of our dreams and the myths and beliefs of ancient peoples, although the dreamer is wholly ignorant in his waking life of the latter.

Another early disciple of Freud, Alfred Adler, but who like Jung has developed a system of psychological thought at a tangent to the Freudian system, conceives of the dream as an attempted solution of some problem arising from a conflict between life's two basic principles—*superiority strivings* or the desire to be superior, and *feelings of inferiority* or the fear of failure. All of us, according to Adler, possess these two aspects of inherent human nature, either of which may become greatly exaggerated by early influences in life. On the one hand we all want to be superior, to attain to our *masculine ideal*, while on the other we stand in fear of failure or of losing what we have already attained. Theoretically, our development may be so one-sided as to lead us to entertain the most impossible ambitions and to plunge headlong into impossible tasks, or to stand in such fear of failing and to experience such strong feelings of inadequacy or inferiority as to paralyze all effort. The dream then becomes an attempted symbolic solution of present difficulties, an attempt to harmonize these two aspects of our nature and the facts of reality. If feelings of inferiority predominate, then the dream may be taken as a warning against attempting something at which we might fail; it stands as a guard or protection over the weak, cautious side of our nature. If our ambitions are strong and chiefly motivate the dream, then it may stand as an encouragement to go on; a symbolical assurance of success. Many dreams, however, particularly of certain classes of mental patients, are purely compensatory,

imaginary realizations of attainments which the individual no longer even aspires to in his waking state.

**Concluding Remarks.** So much for the various theories of dreams. The reader should not fall into that fallacy—so common to us all—of feeling that he must either whole-heartedly accept or completely reject any one of the theories. It is more than probable that they all have a large element of truth; and it is just as probable that each one of them is partly false or at least inadequate when applied to all dreams and to every type of dream situation. The Freudian theory has shed a world of light not only on the nature and significance of dreaming but on much of the thinking and behavior of waking life. But surely there is no sound evidence, even of a logical sort, that would incline us to the view that all dreams are motivated by sex wishes, save those which are traceable to hunger, thirst, etc. At the same time if dreams are expressions of conflict, repression, etc., we should expect sex to be involved in a large number of them, for the reasons given in an earlier chapter.

Whatever may be our final conclusion as to the cause (or causes) of dreams, we cannot help assuming that they are in some way expressions of aspects of the personality—sentiments, moods, wishes, anxieties—that they are somehow true to the particular mental make-up of the individual. We have suggested that sleep, from a psychological standpoint, is a temporary dissociation of the mental integration, and in keeping with this we should expect mental activity during sleep to be one-sided and extreme, inasmuch as it would be the expression of dissociated systems instead of a single integrated system.

Closely similar to nocturnal dreams are day-dreams, reveries, or autistic thinking. In fact, the sole distinction that can be made is that the latter take place in the ab-

sence of sleep. Another distinction of degree might be made in most cases. In the nocturnal dream the individual is more completely divorced from his immediate physical surroundings than he is in the day-dream. But in other respects these two classes of mental activity are very much the same. It is frequently said that the day-dream is simply thinking for its own sake, as distinguished from purposive, adaptive, or realistic thinking. The fact that in his day-dreaming the individual is sometimes entertaining thoughts of illness, death, loss of fortune, etc., does not refute this contention. For if one searches deeply enough he will usually find that whatever the nature of the mental content, it is in some way giving the person satisfaction. Many of our day-dreams are obviously self-satisfying; they frankly pat the dreamer on the back. Many of them are at the same time compensatory. In them the individual realizes those ambitions which his defects or shortcomings keep him from actually attaining in real life.

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## CHAPTER XVII

### HYPNOTISM AND SUGGESTION

**Historical Sketch.** The scope of the present text does not permit us to take up in any detail the large and interesting topic of suggestion; for the most part we shall speak only of hypnosis, viewing it as a special and extreme form of the larger topic.

There is perhaps no phenomenon in the entire field of psychology which is more interesting than hypnosis, but which at the same time has received less experimental study. Yet as far back as we have written history we find evidence of suggestion and hypnosis playing an important part in man's life and activities. The ancient medicine man cured the sufferer by means of incantations and phantastic ceremonies. The East Indian fakirs mystify their onlookers by arousing, or inducing, in them a high degree of suggestibility and then causing them to hallucinate a boy climbing hand over hand up a rope and finally disappearing into the sky. Even in our own country some persons carry small potatoes, rabbits' feet, or other objects in their pockets to rid themselves of "rheumatic" pains—and it sometimes works, because they believe it will. Similar examples involving marked suggestibility could be cited almost endlessly. Inasmuch as we have failed to understand the true nature of such phenomena, it is not surprising that various objects in man's environment should have been endowed with curative, mystical, or supernatural properties. But although suggestion is as

old as man, it was not until the latter part of the eighteenth century that it began to attract the serious attention of the scientific world.

Friedrich Anton Mesmer, a Vienna student of medicine, discovered in 1774 that by placing magnets on the body of a patient who was manifesting a variety of peculiar symptoms (apparently of a hysterical nature) he could cause the symptoms to disappear and to remain absent for a period of six hours. He further observed that the patient was definitely influenced in somewhat similar fashion by any object which he had touched (in her presence), whereas she remained indifferent to contact with all other objects, including other individuals. This fact led Mesmer to the false conclusion that the influence was of the nature of a physical fluid which passed from him to the patient. He further inferred that, since objects which he had previously touched had a like influence upon the subject, it was therefore possible to "magnetize" any object by means of handling or making passes over it. In other words, the magnetic fluid might pass directly from his body into that of the patient or it might equally well pass first from him into some inanimate object and from that into the patient, upon bringing the two (object and patient) into physical contact. This hypothetical fluid he conceived to be a kind of *animal magnetism*, physical in nature.

In 1778 Mesmer went to Paris and there announced that he had made a wonderful physical discovery. His experiments and many "cures" of mental disorders soon brought him into the limelight. In order to cure several patients at the same time he introduced his famous *baquet*, a kind of crude storage battery with long handles for the patients. A number of patients could thus be subjected to the influence of the "magnetic fluid" at the same time.

Although Mesmer continued to enjoy a large lay following, and even received no little attention and encouragement from certain individuals of royal birth and great influence, men of science were far from being unanimous in their acceptance of his doctrines. A great deal of controversy raged between the antagonists and protagonists until interest in hypnotism (then called mesmerism and animal magnetism) began to wane and finally, in 1840, the Academy of Science in Paris placed a formal ban upon the entire subject. Control tests which had been made had failed to substantiate Mesmer's contentions that the phenomena observed were due to a magnetic fluid passing from the operator to the subject.

A truer interpretation of hypnotic phenomena awaited the studies of James Braid, a noted English surgeon, begun in 1841, although it appears that many of Braid's conclusions had already been anticipated as early as 1814 by the Abbé Faria.<sup>1</sup> Braid's interest was strongly aroused in hypnotic phenomena as a result of a popular demonstration given by a traveling mesmerist. Greatly impressed by what he had observed, Braid immediately began an investigation of the phenomena by self-devised experiments. He had a friend gaze fixedly at the neck of a bottle, which soon induced a passive state strongly resembling sleep. He obtained similar results upon his wife, as well as upon most of the others with whom he experimented. From his observations he arrived at the following conclusions: "I now stated that I considered the experiments fully proved my theory, and expressed my entire conviction that the phenomena of mesmerism were to be accounted for on the principle of a derangement of the state of the cerebro-spinal centres, and of the circulatory, and respiratory, and muscular systems, induced, as I have explained, by a fixed

<sup>1</sup> Jastrow, Joseph, *Fact and Fable in Psychology*, p. 200. Houghton, Mifflin.

stare, absolute repose of body, fixed attention, and suppressed respiration concomitant with that fixity of attention. That the whole depended upon the physical and psychical condition of the patient, arising from the causes referred to, and not at all on the volition, or passes of the operator, throwing out a magnetic fluid or medium.”<sup>2</sup> This work of Braid was the true beginning of the modern era of what he called hypnotism.

But it must not be inferred that a serious study of hypnotic phenomena had won, with the work of Braid, an undisputed right to exist. Far from it! In fact, Braid himself was made to suffer for manifesting a serious interest in something which was assumed to have no legitimate place in science. For, then as now, human nature was unduly skeptical and intolerant of any new theory, particularly one which seemed as foreign to established knowledge and rational behavior as those relating to hypnotism. Just as the average fond parent believes there are certain things of which the child must remain ignorant if it is to grow up “pure” and “innocent,” so has science been prone to take the attitude that there are certain things which must be excluded from its domain if it (science) is to remain unviolated. An absurd attitude, to be sure, but nevertheless it is one which has always existed to some extent. Moreover, the general interest in hypnotism had considerably died down by the time of Braid’s publications, which may explain in part the scant attention which they received.

So it was not until the beginning of the last quarter of the nineteenth century that hypnotism began to take its place among the “sciences” of human nature. The publication in 1875 of an article on hypnotism by Richet, in an authoritative physiological journal, followed a few years later by the influential study and support of Charcot

<sup>2</sup> *Ibid.*, p. 206.

in Paris, went far toward removing the ban which had been imposed within scientific circles. At about this same time, Bernheim of Nancy was actively engaged in the study of hypnosis. Incidentally, a controversy arose between Charcot (the Paris school) and Bernheim (the Nancy school), which has come down to us to the present time; the former defining hypnosis as an artificially induced neurosis, or nervous or physiological condition, and the latter defining it in psychological terms as a condition of increased suggestibility.

With this admittedly very sketchy review of the history of hypnotism, we shall now give our attention to those phenomena which the word denotes. Obviously, the best way to become familiar with the phenomena of hypnosis is to observe and study them in a hypnotized subject; and a hypnotic demonstration, properly conducted, is always in place in a course in abnormal psychology, despite those views to the contrary held by a few who think it too dangerous to be meddled with except by the trained physician.<sup>3</sup> The best approach to the phenomena of hypnosis, in the absence of an actual demonstration, is, perhaps, to take a hypothetical case and see what we find.

**Some Reactions of the Hypnotized Individual.** The subject is requested to seat himself, preferably in a comfortable chair, and relax. If the subject is nervous or anxious, this should be overcome before going further. If he is consciously antagonistic to being hypnotized, or if he is strongly and openly skeptical concerning the reality of hypnosis, he should not be used. The willing, coöperative, open-to-conviction type of individual will make a more

<sup>3</sup> Incidentally, it has long been a puzzle to the writer why so many people—even college professors—should consider the medically trained man fitted to deal with problems of which he frequently knows nothing; and a great many medical men know little or nothing about hypnosis. Indeed, some of them are as skeptical, even superstitious, about the whole matter of hypnotism as the mountain-folk of Tennessee.

desirable subject, particularly for a class demonstration. Having obtained the coöperation of the subject, the experimenter (hypnotist) has him fixate a small object (a small light, a dot on the blackboard, the head of a thumb tack) placed a little above the level of his eyes and at a distance of two or three feet. After the subject has gazed at the object for two or three minutes, the experimenter may begin by telling him his eyes are growing heavy and drowsy, that his body is becoming relaxed, his pulse is getting slower, he is gradually going to sleep. As the subject's eyelids begin to droop, the forcefulness of the suggestions is increased; he is told that his eyes are going closed, his arms and legs are growing heavy, that his whole body is becoming extremely relaxed, and he is going into a deep sleep. The experimenter continues to give suggestions to the effect that the subject is going deeper and deeper asleep, for several minutes after the eyes become closed.

Now, assuming that we have an unusually good hypnotic subject, we are in a position to make some very interesting observations. We observe, to begin with, that the subject appears perfectly passive, apparently quite oblivious to his surroundings, his head inclined forward on his chest, and his whole body indicating a condition of almost complete relaxation. To all appearances the subject is sound asleep. A member of the audience requests him to move his hand, but he gives no sign of hearing. But if the experimenter tells him that his hand is going to move in a certain direction, immediately the hand moves in the given direction. Or the experimenter tells him he is going to cross his legs and the suggestion is carried out; he tells him his ear itches and the subject rubs it vigorously. Again a member of the audience gives the subject a suggestion or command, but he gets no response. Thus, we must conclude either that the subject cannot hear or else that he

simply ignores suggestions and commands given by anyone besides the experimenter. The latter is the interpretation that we shall eventually have to make. And this peculiar relationship which has been established between the experimenter and the subject and which predisposes the latter to ignore suggestions and commands, except when they are given by the experimenter, is termed *rapport*.

Now the experimenter points to the blank wall, commands the subject to open his eyes and read the time of day from the face of the clock. The subject follows the direction of the other's finger and states the time (positive hallucination). If requested, he will describe the clock in some detail. He is then told that his fingers are covered with glue and that he is getting it all over his clothes. The subject shows considerable perturbation, rubs his fingers with his handkerchief and perhaps requests permission to leave the room and wash his hands. In a few minutes he returns, apparently much relieved.

The subject is told that he will hear no sound except the experimenter's voice whereupon, even though others shout at him, he declares he hears nothing (negative hallucination). The experimenter hands him a piece of paper, tells him it is cake and that he is very hungry and the subject eats with great relish (illusion), taking no heed of the laughter of the audience. Or perhaps the subject is told, that the desk is a piano and he (the subject) a musician, and that he is going to play a selection. He thereupon goes through the actions of playing a piano.

Equally interesting facts of a slightly different order may be observed. The experimenter lifts the subject's arm to a horizontal position, extended straight out from the body, and releases it. The arm remains in the position in which it has been placed (catalepsy). How long it

might remain there is conjectural. McDougall <sup>4</sup> reports a case in which the arm remained extended for thirty minutes without any indication of fatigue in the subject. The reader might try holding his arm in a horizontal position, completely extended, for ten minutes, or even five, and note how fatiguing it is. The subject may be assured that his hands have lost all sensitivity, and he will then declare he feels nothing even though a pin is thrust into them (cutaneous anesthesia). If told that his arms are paralyzed and then requested to write his name on the board, he will complain that he cannot move his arms (functional paralysis). One subject took a piece of chalk between his teeth and proceeded to carry out such a command. The experimenter points to a seat occupied by one of the subject's classmates, tells the subject it is vacant and that he is going to sit down in it. Without giving any indication of seeing the other student (visual anesthesia), the subject proceeds to sit down in the former's lap. Although he may show perplexity, apparently at finding himself perched above the other students or at the unfamiliarity of his awkward or uncomfortable position, he still appears completely oblivious to the fact that he is sitting on someone.<sup>5</sup>

<sup>4</sup> McDougall, *Outline of Abnormal Psychology*, p. 88. Scribner.

<sup>5</sup> But what, the reader asks, would the hypnotized subject do in this last instance in case the person occupying the seat were a member of the opposite sex? Would this make no difference? Assuredly, it would be hardly dignified on the part of the instructor (experimenter) to make such a request of the subject. But fortunately we are able to vouchsafe a fairly definite answer without putting it to an actual test. It would depend primarily upon two factors—the depth of the hypnotic state and the general personality make-up of the subject. We all know that one individual would suffer far less embarrassment at being forced to carry out such an act before a group of people than some other person would. And it is well known that a deeply hypnotized subject is much more prone to carry out the suggestions or commands of the experimenter than one in a light state of hypnosis. These two facts together with certain others enable us to say that the subject would either carry out the suggestion, or wake up (*i.e.* come out of the hypnotic state), or perhaps become more or less hysterical or excited and do something else, such as leave the room or cry or become angry. And in keeping with this we can say that there is most probably a very definite limit to the influence which the experimenter has over the hypnotized subject, at all times and in all situations. If the reader has perchance come by the no-

The subject is now given two suggestions. The first is to the effect that after he is awakened he will multiply a three-place number by a two-place number and write the answer on the board, and the second is to the effect that he will have absolutely no memory for anything that has been said or done during the hypnotic period (post-hypnotic suggestions). Two numbers are now given to him and he is immediately awakened. If questioned he will now report that he has no recollection whatever for the hypnotic period, that it is exactly as if he had been asleep (post-hypnotic amnesia). We purposely engage the subject, who now appears to be entirely awake, in conversation. At the end of a few minutes he walks to the board and writes a number which, if the problem we gave him was not too difficult, is the product of the two numbers. We ask him what the number means, what it stands for, and why he wrote it on the board. He replies that he has no idea of what the number signifies but that it just came to his mind and that for some reason or other he wanted to write it down. He is wholly ignorant of its significance or of how he obtained it. In other words, while engaged in conversation he was solving a mathematical problem without being aware at the time that he was engaged in any such activity (subconscious activity). The experimenter again hypnotizes the subject. The subject now readily re-

tion that the experimenter has absolute control over the subject, he should lose no time in discarding it. We might add the further reflection that some of us are far more inclined to shift responsibility to the situation than others of us are. Some individuals, when in Rome, do as Romans do, while others tend to hold fast to their own personal standards quite regardless of the situation. This may recall a supposed fundamental difference between the introverted and extroverted types of personality. Thus, whereas one individual might find an adequate excuse for carrying out a suggestion such as the one first mentioned, in the fact that the experimenter told him to do it, another individual would not; rather he would tend to refer the situation to his own personal values, and this might cause him to wake. This implies that no fundamental change in the individual's personality occurs in becoming hypnotized, which implication is quite correct according to all known facts, unless the person be a case of multiple personality, or a hysteric.

calls all that occurred during the previous hypnotic period and he also tells us in detail how he solved the problem in multiplication.

**Are Hypnotic Phenomena Genuine?** We have attempted to point out some of the more obvious aspects of hypnosis, such things as might readily be observed by the casual onlooker at nearly any hypnotic demonstration. We have seen that illusions, hallucinations, amnesia, anesthesia, paralysis, muscular contractures, and various other phenomena can be easily induced in a good hypnotic subject. And we may add that they can all be made to take place following the hypnotic period, that is, as post-hypnotic phenomena. The question which now most commonly arises is whether these manifestations are real or merely a kind of pretense or playing-up-to-the-situation on the part of the subject. It has been said that hypnosis is nothing more or less than an extreme willingness in the subject to please the experimenter, and that if the extent of this willingness is exceeded by the commands of the experimenter, then the subject will not respond. Possibly hypnosis may be viewed from such an angle *provided we duly stress this matter of willingness*. But unfortunately this does not satisfactorily answer the question with respect to the genuineness of the phenomena. To say that the subject is willing to do this or that is merely to observe that he seems to do it with real good nature. But why? Major surgical operations have been performed upon hypnotized subjects without the use of an anesthetic, and such subjects have reported both during and after the operation that they felt no pain. They were assured, of course, by the experimenter (hypnotist) that they would experience no pain. To sum it all up by merely saying that they were entirely willing to comply with the experimenter's commands or suggestions, is but to state an obvious fact.

But, at the present time, everyone except the ignorantly skeptical person agrees that the phenomena of hypnosis are genuine in the strictest sense; they are in no way comparable to the deliberate faking or shamming of the waking state. The young woman is hypnotized and told her mother is dead. She weeps copiously and cannot be comforted except by the experimenter. The interesting and significant fact here is that the same young woman will in all probability find it absolutely impossible to weep in her waking state by merely imagining that her mother is dead. Perhaps the most convincing evidence that hypnotic phenomena are real and not feigned come from a study of post-hypnotic suggestions. One good example will go far toward convincing the most skeptical individual. Assume that a deeply hypnotized individual is given the suggestion that he will under no consideration leave the room till everyone else has left, and following this post-hypnotic amnesia is suggested for everything that has been said. Now observe what happens when the subject is awakened. The demonstration is brought to a close, or the class is dismissed, and everyone starts for the door. The subject will be observed to linger behind the others. Now, wishing to test the force of the suggestion, one of the members steps aside holding the door open for the others to pass through. When the subject comes to the door he courteously motions for the other to precede him. The other individual returns the courtesy. The subject refuses to leave first, though he may still be very courteous. The other insists, the subject grows suddenly obdurate. Even begging him to go first has no effect; he perhaps contends that it is entirely a matter of principle and therefore he must refuse to concede to the other's request. The other may plead, argue, threaten, but to no avail. He may now recall that he has a class in the room the next hour, sit

down and lose himself in a book. The subject immediately finds a reason (an excuse) likewise for remaining (rationalization). Perhaps he says he must see some student who has a class in the room the next hour, or he may say that he has always been curious as to the nature of the course, or to see what the instructor is like, or something else; at any rate he will find some reason for remaining. And if the reason which he gives for remaining is seriously questioned, he will perhaps take offense and become angry, for to him it is the real reason; he has no memory of the post-hypnotic suggestion which was given.

Any amount of evidence could be cited in support of the genuine nature of hypnosis, *i.e.* that the hypnotic state is decidedly different from that of normal wakefulness. But to go into that aspect of the problem would be out of place here. The reader who is sure there is nothing to it has small chance of learning anything about it. Incidentally, we might say that the state of mind of such an individual is frequently very much like that mental state or condition which we call hypnosis—as we shall see later.

**What Are the Inherent Aspects of Hypnosis?** There is a second question which has perhaps occurred to the reader. Exactly what are the essential characteristics of hypnosis? This question is much more difficult to answer than the one we have been considering. It has been observed that certain phenomena seem to occur spontaneously in many hypnotic subjects, while others are undeniably the result of suggestion. For instance, the subject does not see a clock on the wall where there is none unless he is told by the experimenter that there is one there. On the other hand, many authorities have contended that certain phenomena are not due to suggestions but are essential or spontaneous aspects of hypnosis. Three phenomena in particular have long been held by many to

characterize hypnosis: catalepsy, post-hypnotic amnesia, and *rapport*.

The term catalepsy was apparently first used in this connection by Petétin in the latter part of the eighteenth century to designate or describe a peculiar wax-like semi-rigidity of the muscles. In some hypnotized subjects the limbs will remain in any position in which they are placed, without any apparent effort on the part of the subject. A case cited by McDougall, in which an arm remained in a horizontal position for thirty minutes without apparent effort or fatigue, has already been referred to. One of the writer's subjects became so cataleptic upon being hypnotized as to make it seemingly difficult for her to walk, the entire body becoming quite stiff. Some subjects manifest marked catalepsy the first time they are hypnotized, while others show little or no indications of it even when they are hypnotized a great many times. Up to the present time it has not been definitely determined whether catalepsy in certain subjects—those who show it the first time—is the result of an expectation of such a condition on their part, and consequently a suggestion-phenomenon, or whether it spontaneously occurs and is therefore an inherent aspect of the hypnotic condition. Moll, a recent noted authority on hypnotism, declared that although catalepsy is easily produced, it is not an essential condition of any stage of hypnosis.<sup>6</sup> Bramwell<sup>7</sup> holds the same view, while many of the older authorities believed the opposite to be true. Young<sup>8</sup> concludes from his own studies of hypnosis that catalepsy is not a spontaneous phenomenon unless the limbs of the subject are manipulated or stroked, or unless he is given the impression in some other way that a cataleptic condition is going to occur.

<sup>6</sup> Moll, A., *Hypnotism* (tr. from 4th Ger. ed.), p. 80.

<sup>7</sup> Bramwell, J. M., *Hypnotism*, 3d ed., p. 153. Lippincott.

<sup>8</sup> Young, P. C., "Hypnotism," *Psychology Bulletin*, 1926, Vol. 23, pp. 504-523.

These facts necessarily point to one of two conclusions: either catalepsy is a spontaneous phenomenon of hypnosis in some subjects but not in others, or else it is a suggestion-phenomenon which may or may not occur, depending upon the expectations—conscious or subconscious—of the subject. Only careful experimental work will enable us to decide which it is.

Post-hypnotic amnesia, *i.e.* amnesia after waking from the hypnotic period, has been accepted by many as a reliable criterion of hypnosis. Thus Hadfield says, "Amnesia is perhaps the best single test of hypnosis as distinct from the hypnoidal condition,"<sup>9</sup> while Mitchell declares, "In the hypnotic state there is recollection, actual and potential, of all the events of waking life, whilst in the waking state there is no recollection of the hypnotic phase,"<sup>10</sup> Wells and other authorities seem to have taken the same view. On the other hand, Bernheim,<sup>11</sup> Moll,<sup>12</sup> Bramwell,<sup>13</sup> and others have taken the opposite stand, contending that post-hypnotic amnesia is not an essential feature even of the deepest stages of hypnosis. There are several facts which appear to support this view.

Young suggests that there has been considerable confusion between inability to recall and inability to recognize. He states that most subjects who are unable to recollect the incidents of the hypnotic period easily recognize them when they are mentioned. This implies that the amnesia is not complete; it involves only recall—not both recall and recognition, which is the case in complete amnesia. Thus it has been observed, in connection with learning under hypnosis and then the re-learning of the same ma-

<sup>9</sup> Hadfield, J. A., *Functional Nerve Disease*, p. 61.

<sup>10</sup> Mitchell, T. W., "Presidential Address," *Proc. Soc. Psych. Res.*, 1922-1923, Vol. 33, p. 13.

<sup>11</sup> See Bramwell, *op. cit.*, p. 105.

<sup>12</sup> *Op. cit.*

<sup>13</sup> *Op. cit.*

terial in the waking state, that although the subject does not recall having learned the material while hypnotized, there is a definite saving in re-learning it in the waking state.<sup>14</sup> Again, experiments show that if the individual makes up his mind before being hypnotized to remember, upon waking, everything that occurs during the hypnotic period, he will be able to do so, or at least nearly everything.<sup>15</sup> Finally, some subjects have amnesia for the hypnotic period only when they are told while under hypnosis that they will be able to remember nothing when they awake. On the other hand, if the subject is told during the hypnotic period that he will remember everything when he wakes, he will usually do so. And while most writers are agreed that no hard and fast line can be drawn between the lighter and deeper stages of hypnosis, post-hypnotic amnesia is not common for the lighter stages. All these facts seem to favor the conclusion that post-hypnotic amnesia is not an essential aspect of hypnosis, but rather that it perhaps depends upon a number of factors in any given case.

McDougall says, "*rapport* is of the essence of suggestion in hypnosis."<sup>16</sup> By *rapport* is meant that peculiar harmonious relationship which is established between the experimenter and the subject. It is definitely one-sided, in a way; the subject assumes an attitude of dependence toward the experimenter. And Coriat lists as three of the four most important symptoms or features of hypnosis: loss of initiative, increased suggestibility, and *rapport*. But, incidentally, the first two of these seem to be nothing more than two different ways of looking at the third. For to lose one's initiative and still be active is to follow out the suggestions and commands of others, and increased suggestibility amounts essentially to the same thing, and

<sup>14</sup> Young, P. C., *op. cit.*, p. 507.<sup>15</sup> *Ibid.*, p. 507.<sup>16</sup> *Op. cit.*, p. 116.

either characterizes this peculiar relationship which is termed *rapport*. It is in this matter of *rapport*, MacDougall thinks, that the secret of hypnosis is to be found. He assumes that in hypnosis a powerful instinct, that of self-submissiveness, is aroused or set off, and that it is due to the inherent nature of this instinct that the hypnotized subject responds as he does to the commands and suggestions of the operator. Thus, since the dominant instinctive tendency or disposition at the time is that of self-submission, the subject is inevitably disposed to accept and put into execution whatever the experimenter suggests or commands.

Certainly there is much to be said in favor of this view, but before following out and testing its implications, it will perhaps be well to consider certain relevant, if not serious, objections which have been made to accepting *rapport* as an essential and fundamental aspect of hypnosis.

The representatives of the New Nancy School of Suggestion, a fairly recent development, contend that all suggestion is auto-suggestion, that all hypnosis is auto-hypnosis. By this they mean that in truth the subject hypnotizes himself, and that the experimenter is superfluous, at least after the first few occasions. If this is literally true, then obviously *rapport* is not an essential aspect of hypnosis. But let us see exactly what this auto-hypnosis involves. If I tell a hypnotized subject that within, say, five minutes after I wake him he will count to himself or recite poetry or read a book and thereupon go back to sleep, he will carry out my statements even though he has no recollection of the suggestion. I may even leave the room, to return in a few minutes and find him asleep (hypnotized). Superficially this may appear to be a case of auto-hypnosis; the subject becomes hypnotized during my absence. But upon second thought we

must conclude that he has simply carried out my suggestions, and moreover, I find upon returning that he responds to my commands while he may completely ignore those of another, indicating that he is in *rapport* with me.

We may go a step further still in the same direction. A student asks me if it is possible to hypnotize one's self. I perhaps reply that it is and he goes home and tries it out. The next day he reports that he succeeded in hypnotizing himself, coming out of the state at a certain time upon which he had decided beforehand. Another student does the same thing without having said anything about it to anyone before trying it out. He will usually say that he believed he could do it and merely wanted to see if he was correct. Now we have something that looks very much like self- or auto-hypnosis; but let us see. The first student was told that it was possible to hypnotize one's self. Perhaps being told this by one in whom he had considerable confidence had something to do with his success. If so, then his becoming hypnotized need have been nothing more than a response to the influence (statements of fact) of another individual, even though that other person was not present at the time. The second individual *believed* he could do it. Obviously that conviction did not arise within himself; our beliefs and convictions are the result of our contact with our environment, particularly other individuals. Even though he may have been absolutely unable to recall how he came by such a belief, the fact remains that it originally arose as a result of some external or objective agency. In ordinary hetero-hypnosis or hetero-suggestion, the individual does not respond unless he accepts the statement or suggestion of the experimenter; and thus he may be said to respond to, or be in keeping with, a truly subjective factor in the nature of a bias, a mental set, a conviction.

Certain evidence of an experimental nature has been offered in support of the auto-suggestion theory. Young and Foote <sup>17</sup> carried out a series of experiments to determine the nature of *rapport* and the relation of auto- to hetero-suggestion. Easily hypnotizable subjects were requested to decide, before coming to the experimental room, upon certain suggestions which they were not to carry out during the hypnotic period. That is, they were instructed to make up their minds beforehand not to obey certain commands or suggestions. These suggestions they were to write down on a piece of paper and place in their pockets, leaving the experimenter in complete ignorance as to what suggestions they had decided to carry out and what they had decided not to carry out. For instance, the subject might decide, and subsequently record in writing, "I shall obey or accept all suggestions while under hypnosis except that of becoming insensitive to pain and tactual stimulations." The experimenters then observed that certain suggestions were not accepted by their subjects and furthermore that these suggestions were always found to coincide with what the subjects had indicated in writing that they would not accept. From their results the experimenters concluded as follows: "The results show that the subjects, by prior auto-suggestion, could exhibit whatever degree of *rapport* they decided upon, ranging all the way from being out of *rapport* with the experimenter on only one suggestion to being out of *rapport* during the whole séance, and responding only to another person's raps." It is the opinion of these writers that *rapport*, together with amnesia and catalepsy, is not an essential aspect of hypnosis.

Here again we have something which, at first glance, it seems might better be termed auto-suggestion than hetero-

<sup>17</sup> See *Psychology Bulletin*, 1926, Vol. 23, pp. 511-513.

suggestion. But, once more, let us see if an analysis of the factors involved seems to support such a view. The subjects were instructed to decide before being hypnotized as to what suggestions they would not accept. And this act of deciding is termed "auto-suggestion" by the above writers. Obviously it is questionable usage of the term; for after all it would be difficult to distinguish between it and such acts of decision as where to eat dinner, or to buy a new hat. Yet we would not want to say that one's everyday acts are the result of auto-suggestions. One can usually supply a reason (cause) for deciding to buy a new hat, or for deciding to eat dinner in a certain place. Can we find any comparable reason, in the above experimental study, for the subject's deciding not to obey certain commands or suggestions? Certainly! *They were instructed to do so by the experimenters.* Thus we are led to infer that a certain degree of *rapport* was established even before the subjects were hypnotized; and the experimenters merely observed the fact that their earlier commands—given in the waking state—outweighed those later antagonistic or contrary commands which were given during hypnosis. But there is nothing particularly new or surprising about this. It has long been known, for instance, as McDougall points out, that if the subject is told to try to remain awake, the experimenter may find all his efforts to bring about a condition of hypnosis fruitless. But here again the subject is simply obeying a command of the experimenter. Furthermore if the subject is told that he cannot possibly remain awake but that he is to try his best to do so, many subjects will pass into a state of hypnosis if the experimenter makes a serious attempt to hypnotize them. There is another interesting fact which has been observed in this connection. If the subject is given a post-hypnotic suggestion to the effect that when he wakes his arms are

going to be completely paralyzed, he will be unable to use them. If the experimenter requests him to write his name on the board, he will reply that he cannot lift his hand. The experimenter insists, but still the subject is unable to gain control of his paralyzed limbs. In short, the subject is out of *rappport* with the experimenter for certain suggestions, due, obviously, to an earlier suggestion which he accepted. But now if the experimenter takes a *sufficiently convincing attitude toward the subject and assures him he can use his arms, the subject immediately regains control of them.*

All of these facts seem to point unmistakably to a certain definite conclusion; namely, that the fundamental aspect or essence of hypnosis consists of a definite mental set or mental attitude on the part of the subject toward *something*. This something may be either a present objective fact or influence (usually another person), or it may be the recall, or thought, of such a fact. Moreover, the recall (or memory) of such a fact may itself exist in the form of an attitude or sentiment or conviction.

The relation of auto- to hetero-suggestion should now be clearer. Whether we view it as the former or as the latter depends, apparently, upon which factors we emphasize. If we always relate the mental set or attitude to the objective influence which was instrumental in bringing it about, and if we lay particular stress upon this objective factor, we shall have no difficulty in seeing all suggestion as hetero-suggestion. On the other hand, if we ignore or overlook this objective factor—particularly in those instances where it is not so obvious—and concern ourselves only with the conviction, belief, or attitude which it establishes (or has already established on a former occasion), then we might conceivably be inclined to view suggestion as auto-suggestion, at least in certain cases. But

then we should be neglecting to take cognizance of this very fundamental factor in the total situation.

Perhaps an example will help to make clear what has just been said. Coué, one of the advocates of the auto-suggestion theory, sometimes instructs his patients to repeat to themselves each day such expressions as, "Day by day in every way I am getting better and better," assuring them that when they do so they will find this very effective in regaining their health and happiness. That it often does prove effective we do not hesitate to admit. This is cited by Coué as an example of auto-suggestion and, since it works, as evidence in support of this theory. But now let us see just what we have. . . . In the first place, how many patients would repeat such an expression if they had not been more or less convinced from the start that it would help them? Very few, we must assume. Then it merely amounts to the patient's carrying out a suggestion or command which has been given to him and which he has accepted. It seems safe to assume that the matter of repetition owes its potency to the fact that it tends to revive over and over the original experience, the experience of receiving and accepting the suggestion. And if this is so, then we are confronted by nothing in the matter of so-called auto-suggestion that is fundamentally different from the clearest-cut case of hetero-suggestion.

**Other Aspects of Hypnosis.** Besides the various aspects of hypnosis which we have brought out so far, there are still others which must be mentioned.

What change, for instance, occurs with hypnosis in the realm of sensory or perceptual acuity, of association and the ability to learn, or in relation to prolonged mental and physical effort? Unfortunately, experimental studies in answer to such questions have been very scarce—but a few have been made. We might say in the beginning that

these studies have offered little support to such contentions as the following, made by an enthusiastic "animal magnetist" (hypnotist) near the middle of the nineteenth century. "An ignorant young man is magnetized and forthwith converses with a 'mental activity which put to blush men of superior education and intellectual endowments.' An eminent lawyer is astonished at his learning and his quotations from legal authorities. He speaks Greek, Latin, French, Polish, all perfectly, and without accent; though when awake he knows no language but English." <sup>18</sup>

Most of the experimental studies of hypnosis have not been done in such a manner as to permit of drawing conclusions that are at all certain. Too often the individual has been tested only during hypnosis, without carefully determining his performance in the same test in the waking state. Two or three studies, however, seem to have been properly carried out. Nicholson,<sup>19</sup> studied the efficiency of his subjects as measured by the ergograph, both in the hypnotic and in the waking state. He found that under hypnosis there was an increase over the results of the waking state in the amount of work done, in the endurance of the subject, and a decrease in the fatigue, both subjective and objective. In a series of experiments conducted by Young <sup>20</sup> there was no appreciable difference in performance during hypnosis and in the waking state in the fields of sensation, perception, finer discrimination, present memory (learning and retention), and physical work which did not involve fatigue. In a series of unpublished experiments conducted by the writer, there was little if any difference in the efficiency of the six subjects tested under hypnosis and in the waking state, when identical instructions were given in the two conditions.

<sup>18</sup> Jastrow, Joseph, *Fact and Fable in Psychology*, p. 219. Houghton, Mifflin.

<sup>19</sup> Nicholson, N. C., *Johns Hopkins Hospital Bulletin*, 1920, Vol. 31, pp. 89-91.

<sup>20</sup> *American Journal of Psychology*, No. 36, pp. 214-232.

The experiment involved the following tests: strength of grip, speed in card sorting, simple addition, and steadiness as measured by the ability to hold the arm steady when extended in a horizontal position. But studies of such a nature should always be supplemented by further tests of the same nature upon the same subjects, involving positive suggestions during hypnosis to the effect that the subject is going to do much better, and also including post-hypnotic suggestions to the same effect. And it is perhaps largely because any experimental study of hypnosis involves so many different factors, many of which it is difficult to isolate or control, that more work in this field has not been done.

The writer made a second experimental study, also as yet unpublished, on hypnosis and the "conditioned reflex." The knee-jerk was conditioned to the sound of a bell and after the conditioning had been fairly well established the response (reflex) to the bell was observed under a number of different conditions. The most significant fact observed was that the subject (particularly in the case of one unusually good hypnotic subject) was unable voluntarily to control the knee-jerk when the bell was rung either during the waking or hypnotic state, whereas following a post-hypnotic suggestion to the effect that she would not hear the bell there was not the slightest demonstrable response. This appears to lend support to the age-old contention in psychology that, at least under certain conditions, if a stimulus is not consciously perceived there will be no response to it.

Many casual and semi-experimental observations have been made on hypnotized subjects, and these have fairly well established certain facts. It is generally accepted that at least certain hypnotized subjects show a heightened sensory acuity (hyperesthesia). One of the writer's subjects

was able to hear the ticking of a watch at fully twice the distance, when under hypnosis, that she could in the waking state. Many such cases have been observed. It is perhaps to be explained in terms of a greater concentration of attention under hypnosis than is possible in the waking state. It has also been quite well established that some individuals are able to recall many events of their past life, frequently events of early childhood, when they are hypnotized that they are absolutely unable voluntarily to recall in their waking state, sometimes even after they have recalled them in hypnosis and they (the events) have been recounted to them by the experimenter. Again, this may be due simply to the fact that in hypnosis the mental activity of the subject may be given a particular bent or direction to a far greater extent than seems possible in the waking state. Thus he responds only to a certain class of stimuli, ignoring all others, or, in other words, being set to respond (think) along a single line the associations are therefore more relevant to the central purpose.

Perhaps the most interesting single aspect of hypnosis is the *post-hypnotic suggestion*. Certain writers have contended that in carrying out the suggestion the individual relapses into a state of hypnosis. Some cases seem to bear this out, as, for instance, the following, while others do not. A young woman was told (while under hypnosis) that upon being awakened she would go to the back of the room—which was very large—and bring a chair to the front, place it at a certain spot, and sit down in it. Amnesia for the suggestion was commanded and she was awakened. She immediately went to the back of the room, got the chair, and sat in it as she had been told. In carrying out the suggestion she had very much the appearance of the sleep-walker, looking neither to the right nor left, and appearing to be quite oblivious to the whole situation in

general. As soon as she sat down she seemed to "come to" with a start and exclaimed, "Well, why in the world did I ever do such a silly thing as that!" But another subject who was told that after being awakened the experimenter (instructor) would completely disappear and she would be unable to see him, reacted very much as anyone might were he to have a similar experience in his normal waking state. The subject suddenly became quite alarmed and called out to one of the students to ask if the instructor had left the room. She afterward reported that the instructor completely vanished. From this she inferred that he must have left, but she was puzzled by the fact that she could still distinctly hear his voice. Moreover, she was struck by the fact that the other students seemed to have their attention fixed upon someone in the front of the room, whereas she was unable to see anyone there. Consequently the whole thing alarmed or excited her somewhat for the moment.

Also it is well known that the subject may carry out the post-hypnotic suggestion even though he recalls very clearly that the suggestion was given to him; and while doing it he may appear fully cognizant of the general situation and, perhaps, of the irrational nature of the act which he feels impelled to perform. This does not indicate that there is a return to the hypnotic state. A husky man student was told that upon being awakened he would want the seat occupied by a certain young woman. He clearly recalled the suggestion but nevertheless immediately demanded the chair. When the occupant refused to give it to him, he threatened in no uncertain terms to throw her out of it unless she complied with his request. No one in the audience doubted his word in the least. At the same time he showed unmistakable embarrassment at his own words and actions.

But perhaps we go too far in denying that the individual necessarily returns to the hypnotic condition. For if we deny that he does so to any extent whatever, how are we to account for the potency of the post-hypnotic suggestion? We have said that in hypnosis there is an arousal of a strong inherent tendency or disposition; and that it is because of this that the individual responds to the suggestions of the experimenter. Now in giving a post-hypnotic suggestion, we must assume that the idea or thought of the suggested act, and also the stimulus which is to call it forth, become strongly linked up with the motivating force or tendency. Or, to state it otherwise, we must assume that the tendency to carry out a certain act becomes strongly conditioned upon a particular stimulus, and that when this stimulus occurs it arouses the tendency which dominates the attention and, to an extent, the activity of the individual until the suggested act is carried out, even though the individual may be quite conscious or cognizant of the total situation and the irrational nature of the act. If he does not recall the suggestion, then only the impulse or desire and the thought of the act are conscious. In either case it amounts to a condition of temporary dissociation. As we have already learned, impulsive acts and obsessions, seemingly not fundamentally different from the post-hypnotic suggestion, are by no means uncommon abnormal mental phenomena.

A matter of considerable interest is the wide range of variability found among individuals with respect to susceptibility to hypnotic suggestion. Viewing hypnosis from the standpoint of dissociation, McDougall concludes that the extroverted individual, who is assumed to be more prone to mental dissociation, is ordinarily the better hypnotic subject. And he goes on to point out that alcohol, which normally results in varying degrees of mental dis-

sociation, conduces to hypnotization. Thus, on the one hand, he has made the observation that the extroverted individual is the more susceptible to hypnotic suggestion, more prone to mental dissociation, and is more readily intoxicated by alcohol; while, on the other hand, the introverted individual is less susceptible to hypnotic suggestion, is less prone to mental dissociation, and is less easily intoxicated. These observations point to a very close relationship between extroversion and hypnotizability.

Although the present writer's experience does not entirely bear out the above conclusions, still he is inclined to think that they are perhaps fundamentally correct. That they may not hold for any given case, may be due to other factors. Viewed from another angle, it is the writer's belief that hypnotizability in any given subject is primarily dependent upon that individual's childhood training or experience. In checking up, he has observed that his best subjects are usually those who have grown up in congenial surroundings; whereas the individual who is a poor or difficult subject often reports an over-harsh treatment at the hands of his parents or that he has been greatly humored and petted. That such a correlation or relationship might exist is not at all inconceivable if we remember, first, that the individual never fully outgrows his childhood habits and attitudes toward others, and secondly, that becoming hypnotized involves, on the part of the subject, the assumption of a submissive attitude toward another individual. The child which grows up in a pleasant and congenial home is obviously required to conform to, and to obey the commands of, others only to an extent which is more or less compatible with his own nature, *i.e.* with his own wishes, viewpoints, etc. Thus he does not unduly suffer at the hands of others or because he takes others more or less at their face value. He grows up with a fairly

wholesome impression of human nature, of the integrity and good intentions of others. But, on the other hand, if the child is harshly treated in the home and finds himself employed as a means to the ends of other individuals, if he is deceived and mistreated, and led to doubt the good intentions of others, then it is quite conceivable that he might develop an antagonism and distrust of the statements and reactions of other individuals. Hence he is not in a position to accept what another says without first giving it critical thought—frequently liberally colored with suspicion—and this attitude is just the opposite of that which it is necessary for the individual to assume if he is to be readily hypnotized. But we do not mean by this that it would ever be possible to determine the hypnotizability of a given individual by merely studying his past home environment. The really fundamental question is how he reacted to his environment, what it meant to him. (One of the writer's subjects has undoubtedly had an unusually harsh and even severe home environment, and he is strongly introverted, but still he is a fairly good hypnotic subject. The significant fact in his case is that he long since gave up trying to "hold his own," he simply gave in to the impositions of others and for years has been obediently carrying out their commands without stopping to question, even though he may clearly perceive that they are in the wrong. In popular terminology, we might say that his spirit was broken early in childhood and has never even started to mend since. In a very general sense one must still be fighting for what he considers to be his just dues, if one is to find him actively antagonistic or critical or suspicious of the commands of others. Or the individual may be so petted and humored as to permit him to grow up with an over-inflated impression of his own importance; and to such an individual the very notion

or idea of submitting, in any way to another person is repellent.

Then there is the question, which is always asked, as to how much influence the experimenter has over the subject. Can he make the subject do anything he wishes, within the physical limitations of the subject? The first answer to this question is No. For obvious reasons very few actual experiments or observations bearing upon this question have been reported, but there is very good reason for believing that the hypnotized subject will not carry out any command which is strictly against his moral nature. Thus when one young woman was given the suggestion, before a mixed audience, that she was going to disrobe and go in bathing, she became hysterical and awoke. Sometimes the subject will openly refuse to accept a suggestion which he is strongly opposed to carrying out, and if the experimenter insists, the subject simply wakes. At the same time it is most probable that some subjects could be induced to depart further from their waking morals and standards than others could. Certain writers, recognizing this possibility of influencing the subject against his moral nature, have come out strongly opposed to the use or practice of hypnosis except in mental hospitals and clinics, and then only by medically trained men. Obviously, there is danger in a surgeon's knife in the hands of a careless or designing person, to say nothing of guns and automobiles and poisons and a great many other things. The whole point of the matter is that the more we know about such things the better able we are to protect ourselves against them; and this is the proper attitude to take toward any possible danger which may arise from the practicing of hypnosis.

**Some Interpretations and Explanations of Hypnosis.** Earlier in the chapter we failed to discover any adequate reason for rejecting the factor of *rappport* as an essential

aspect of hypnosis, and we likewise failed to find any distinction of a fundamental kind between auto- and hetero-suggestion. Accordingly we may return to McDougall's assumption that hypnosis is based upon, or involves, a specific instinct (innate disposition) and that hypnotic phenomena are primarily but an expression of this instinct. There are various facts which lend a high degree of tenability to this hypothesis. To begin with, the reactions of the hypnotized subject are clearly of a submissive nature as regards the experimenter. He is told to get down on his hands and knees and to crawl about the room, and he immediately obeys; he is told that he knows nothing, and he readily admits it; the experimenter declares that two and two are five, and the subject agrees. In short, he submits, at least within certain wide limits, to any imposition to which the experimenter elects to subject him. Consequently, whether or not we see fit to assume that an instinctive disposition is brought into play and is the basis or motivator of his behavior, we must agree that his reactions to the experimenter are distinctly of a submissive nature.

That an instinctive disposition is definitely and strongly aroused when the subject is hypnotized is suggested by the fact that although the experimenter may arouse a considerable degree of anger in him, this does not usually alter the state of *rappor*t, except that the subject's reactions may lose some of their spontaneity. This certainly indicates that there is some force or tendency, operative in the subject, which tends to inhibit an outward manifestation of his anger. And such a force, it seems, could hardly be anything but some inherent tendency, since we have no evidence whatever that such a force or agency is of a rational or moral nature. One of the writer's subjects became so angry, following a suggestion that one of her eyes

was itching most painfully but that she would be unable to raise either hand, that she reported upon being awakened that she had experienced a very strong desire to strike the experimenter. And upon being awakened she vented her anger quite as far as a young woman might be expected to do under similar circumstances. Yet, while hypnotized, she continued to be readily susceptible and submissive to the writer's suggestions and commands.

The work of Sidis on sleep and "hypnosis" in the lower animals also supports, to an extent, McDougall's interpretation. Upon being placed on their backs or sides with their movements restrained, the animals became passive (*i.e.* submissive) to the manipulations of the experimenter. Incidentally, Sidis concludes from this that hypnosis in man is a partially developed instinct, both it and sleep having been derived from a primitive rest-state similar to that observed in the lower animals. However, the resemblance between sleep and hypnosis seems to be, upon closer study, largely superficial. Hypnosis is strongly characterized by a definite mental attitude or set toward some fact; so far as is known, there is nothing of this nature in normal sleep. On the other hand, the assumption of a peculiarly passive attitude or state—frequently in the presence of danger or a restricting agency—which has been both casually and experimentally observed in many of the lower animals, is closely similar to the submissive behavior of man, there being considerable evidence that both are instinctive in nature. And since hypnosis is characterized in its objective aspect by a definitely submissive attitude and behavior, it is merely in keeping with certain facts to assume that it involves, or is based upon, an inherent tendency or instinct.

Although this is perhaps as near as we can come at the present time to the true nature of hypnosis, still we should

not permit this explanation of it to predispose us to overlook other interpretations which have been offered. We will recall that the earliest attempt at a scientific explanation of hypnosis was couched in terms of a physical force, a fluid, which passed from the body of the experimenter to the subject. This, it was held, accounted for the influence of the experimenter upon the subject; in other words, for the *rapport* between the two. This explanation has been entirely rejected by more recent authorities with the exception of a very few.<sup>21</sup>

Charcot believed hypnosis to be an artificially produced neurosis, closely allied to hysteria, and that only subjects of a definitely neurotic (hysterical) make-up could be hypnotized. Janet, a pupil of Charcot, also makes considerable of the similarity between hypnosis and hysteria, holding that both are based upon a narrowing of the field of consciousness. According to Janet, the personality is a synthesis, depending upon *psychic energy* for its maintenance. Anything which tends to lessen the amount of psychic energy consequently results in a partial or complete breaking down of the mental synthesis and in an inevitable narrowing of the field of consciousness. Such a condition, if it is extreme, is termed *hysteria*. Now, since the hypnotizable subject is a potential hysteric, according to Janet, possessing an "unstable" personality, it is relatively easy, by having him fix his attention on a particular object or thought, by giving him suggestions, commands, etc., in keeping with the direction of his attention, to bring about an actual narrowing of the field of consciousness—and this is hypnosis.

Coriat and certain others conceive of hypnosis as a state of mental dissociation. Thus any impulse, sentiment,

<sup>21</sup> Alrutz, S., "Zur probleme der Hypnose," *Zeit. f. psyther. und med. psychol.*, Vol. 5, pp. 31-41.

or emotion, any thought or "idea," may be aroused by the suggestions of the experimenter. This implies an inability, or failure, on the part of the subject to react critically to the statements, commands, and suggestions given. Since one's critical thinking involves both his past experience and a recognition of the various aspects of the present situation, we must conclude that associations and perceptions involving these factors are not aroused. In other words, the subject follows out a given perception or thought in actual acceptance of it or in overt behavior without referring the perception or thought to his past experience (knowledge of things) or to the various aspects of the existing situation—and this is essentially what is meant by dissociation. It seems, then, that hypnosis might be viewed as a condition or state of mental dissociation.

But the primary objection to "dissociation-theories" is that they do not explain hypnosis, they merely describe it. As purely descriptive concepts, they may all be quite correct; at least there seems to be no obvious objection to them as such. Hypnosis perhaps does amount to a state of mental dissociation; and there does undoubtedly result a narrowing of the field of consciousness; and it is somewhat similar to the condition known as hysteria. But why should giving an individual suggestions, having him concentrate his attention, etc., result in such conditions? It is only when we conceive of some force, some tendency or instinct, being aroused, put to work, as it were, that we can begin to account for such conditions arising. Another objection to these theories—and this is primarily an aspect of the one already made—is that they go too far in viewing hypnosis as a passive condition. The hypnotized individual is submissive but, in a strict sense, he is far from being passive (*i.e.* inactive). Even though he sits perfectly quiet with his eyes closed, in the absence of any

suggestions from the experimenter that he react in an overt manner, we must conclude that his assuming such a "passive" attitude or state is itself a definite reaction. Moreover, so far from being truly passive, *i.e.* indifferent to stimuli, we find that he is strongly inclined to react, and that very readily, to certain stimuli. Thus, since we are dealing with a particular kind of activity, or with a proneness toward such, instead of with an absence of activity, we must assume some force, presumably an inherent tendency or disposition, operative in the individual if we are to *explain* the facts.

Freud's theory of hypnosis is, naturally, sexual. The libido (sexual energy) of the subject becomes directed toward, or transferred upon, the experimenter. More than this, hypnosis is in a sense and to a certain extent a regressive phenomenon. The subject tends to regress toward an infantile level, and the experimenter therefore becomes a surrogate of the parent (usually the father). We then have essentially the original fixation upon the parent revived, which accounts for the submissive type of behavior which we observe in the subject toward the experimenter. At the same time this original fixation or attachment of the child to the parent is fundamentally sexual, and likewise the attachment (*rapprochement*) of the subject to the experimenter is sexual.

It seems unnecessary to rehearse the criticisms which have already been made of Freud's views, which apply here in very much the same manner as elsewhere. That the relationship between the subject and experimenter is fundamentally sexual, when viewed from either side, is highly improbable. At the same time it is very probable that sex attraction may, and often does, enter into the situation, and in part accounts for the particular attitude which the subject assumes toward the experimenter.

**The Relation between Hypnosis and Suggestion.** Before concluding our chapter, a word is in order concerning the relation of suggestion to hypnosis. The reader has necessarily inferred from what has been said that there is no sharp distinction to be drawn between suggestibility and hypnotizability. This is true in so far as actual facts seem to warrant any distinction. However it should be pointed out that an individual may be quite suggestible to a certain other individual but hardly at all to others. Also, many individuals seem to be quite suggestible up to a certain degree but scarcely at all beyond that. Most persons who have used hypnosis to any considerable extent have found that the majority of individuals are hypnotizable to varying extents, while the remainder seem not at all susceptible.

Much has been written about the extreme suggestibility of children. But it seems very likely that many writers have badly confused suggestibility with ignorance. The child, as compared with the adult, is extremely ignorant, and therefore is more prone to accept the statements and suggestions of those whom he recognizes to be his superiors. It seems not to have been observed that children are particularly suggestible to other children of their own age. We must be careful, therefore, to distinguish between suggestibility and ignorance. By suggestibility we mean the tendency which is found in most individuals in varying degrees to accept statements and suggestions of fact which are contrary to their own knowledge and experience. If they have no knowledge which they may bring to bear upon the statement made and therefore accept it as being true and act accordingly, we should hardly call them suggestible. But if any individual is told that his right arm is going to become paralyzed and it does, in the absence of any former experience of a similar nature or any

condition which might lead him to suspect that he is going to lose the use of his arm, then we might properly characterize him as being suggestible.

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## CHAPTER XVIII

### THE FEEBLE-MINDED INDIVIDUAL

**Orientation.** Before taking up a discussion of the feeble-minded individual, we might well return for a moment to our concept of the normal person. We have said that he is to be regarded always as an integration of various aspects or functions and that these aspects may be listed under the three general headings: cognitive, conative, and affective. We have assumed, moreover, that these different aspects are inherently organized or integrated, constituting the various innate dispositions; and that these innate dispositions become combined, primarily as the result of conditioning and the elaboration of their cognitive aspects, into larger and more complex mental dispositions, the sentiments and attitudes; and the expression of the sum-total of these various dispositions as an integrated whole we have called the personality.

Now in the preceding chapters we have been concerned primarily with the individual's urges and emotions. We concluded, for instance, that mental disorders were, in the final analysis, always the result of thwarted urges and emotional tendencies. And in doing this we have largely neglected the cognitive aspect of the individual's personality, assuming in each case that there was nothing wrong, as such, with his intellectual capacity or functions. But, although a neurotic or psychotic individual may be either deficient or superior with respect to his cognitive capacity (intelligence, broadly speaking) and although this fact

may have considerable significance in any given case, nevertheless it seemed better to ignore in general the matter of intelligence in our discussion of the preceding topics. We are now ready, however, to consider briefly the significance of the individual's cognitive nature in his adaptations to his environment. This implies that the feeble-minded individual is deficient or in some other way unusual only with respect to his intellectual capacity. Although this is not strictly true, nevertheless we can say at the outset that feeble-mindedness is first and foremost a matter of cognitive or intellectual deficiency—but this will become clearer as we proceed. First of all we must familiarize ourselves with the meaning of certain terms and with the general nature of our problem.

**Some Terms and Definitions.** The term *feeble-minded* means literally, of course, "having a feeble or weak mind"; and the term *mind* when used in this connection refers particularly to the cognitive functions, such as perceiving, thinking, judging, remembering, and imagining. Consequently a feeble-minded person is one who perceives only the more obvious aspects of a situation, whose thinking (if there is any) is of a very simple order, who judges poorly and who is likewise deficient in memory, imagination, etc. *Feeble-mindedness*, then, connotes an inferior cognitive capacity. Instead of feeble-mindedness, the terms *mental deficiency*, *mental subnormality*, and *amentia* are sometimes used. With one or two exceptions to be noted later, these terms all have the same meaning. The reader must be careful to distinguish, however, between the terms subnormality and abnormality and the terms amentia and dementia. A subnormal individual, technically speaking, is one who is considerably below the average intelligence of the group; an abnormal individual is one who is simply considerably different from, but not

necessarily below, the average person in any one of many different respects. The neurotic individual is abnormal but not necessarily subnormal, although he may be in any given case. If he is, then we simply have an individual who is characterized both by subnormality and abnormality; he is both subnormal and abnormal. *Amentia* means "without mind" and is properly used only with reference to those individuals who never have had, at least not since a very early age, normal or near-normal intelligence. The term *dementia* is applied not to the individual who never has been of normal intelligence but to the person who has deteriorated mentally, who has suffered a loss of mental capacity. An example would be the psychotic individual who has become demented. Now since these various terms have technical meanings, the reader should be careful to use them in their proper sense. It is incorrect to speak of the demented individual (the individual who has lost his mental capacity) as feeble-minded, inasmuch as the feeble-minded person is technically one who never has had a normal (or near-normal) degree of intelligence. We shall take up the meaning of certain other technical terms later in the chapter.

Since the individual's intelligence, or his lack of intelligence, is revealed, broadly speaking, only by his reactions to his environment, and inasmuch as the individual's reactions may be considered from various angles, it naturally follows that we should have different concepts or definitions of intelligence and of feeble-mindedness. Let us forget for the moment the general definition of feeble-mindedness which we have given and consider some of the various criteria which have been suggested. It will be sufficient to mention five of these: legal, medical, social-economic, pedagogical, and psychological.

*Legal* definitions of idiocy (the extremest degree of

feeble-mindedness) have existed since ancient times, indicating that it has long been recognized that certain individuals, because of mental deficiency, are less responsible than the average person in a legal sense. An example of early definitions of this sort is that given by Lord Coke who says, "An idiot, or natural born fool, is one who from his nativity, by perpetual infirmity, is *non compos mentis*."<sup>1</sup> A more recent definition, given by Blackstone, is: "An idiot, or natural born fool, is one that hath no understanding from his nativity, and is therefore by law presumed never likely to attain any."<sup>2</sup>

These definitions are fairly in keeping with our present sociological concept of individual responsibility. It is generally assumed that the individual who has the intelligence to distinguish clearly between social and antisocial acts and who is able to foresee the probable consequences to himself of committing antisocial acts is legally responsible. More than this, it is generally assumed that such an individual is responsible in every sense of the word for his actions, that he is actually free to choose between "right" and "wrong." On the other hand, it is assumed that if an individual does not have the mental capacity to learn to distinguish between social and antisocial acts and is not able to foresee the probable consequences to himself of his actions, he is feeble-minded (or insane) and therefore is not responsible for his actions. Such a concept when put into practice may, and perhaps does, have a very definite social value, since, to the extent that a belief in one's own responsibility is inculcated in the individual, to a like extent will it act as a deterrent to antisocial behavior. But the student of abnormal psychology should recognize the fact that from a psychological standpoint there can be no

<sup>1</sup> Hollingworth, Leta S., *The Psychology of Subnormal Children*, p. 40. Macmillan.

<sup>2</sup> *Ibid.*, p. 41.

such thing, strictly speaking, as responsibility for one's own actions. For we have seen (Chap. II) that the individual's reactions are determined by his innate dispositions, his past conditioning, and the sentiments and attitudes which characterize him at the time; and that the control of an antisocial impulse always consists of nothing more or less than the simultaneous arousal of some other impulse (sentiment) which is antagonistic to the one which we speak of as being controlled. Only if we were to re-introduce the old philosophical concept of *free will* could we speak of the individual as being responsible for his actions. But we have yet to find either a need or a place in psychology for free will.

Hence we see that legal concepts of feeble-mindedness are really outside the realm of psychology. Before dismissing them, however, we must mention a second objection to such definitions. The feeble-minded person differs from the normal only in the matter of degree; between the most intelligent and the most feeble-minded there is a continuous gradation of degrees of intelligence. Now although we might, and actually do, draw an arbitrary line through this graded series, calling all below the line feeble-minded and all above the line not feeble-minded, yet to make any such arbitrary distinction the sole basis for holding an individual legally either responsible or irresponsible for his actions becomes a gross absurdity. Supposing we decide to label the individual with intelligence  $X-1$  feeble-minded and the individual with intelligence  $X+1$  not feeble-minded, then what shall we do in the case of the individual with intelligence  $X$  when he commits a crime? This is a question of great importance to society and of grave importance to the individual; but as yet its solution is hardly begun.

Perhaps the most authoritative *medical* criterion of fee-

ble-mindedness is that given by Tredgold. "The condition is a psychological one, although the criterion is a social one, and we may accordingly define amentia as *a state of restricted potentiality for, or arrest of, cerebral development, in consequence of which the person affected is incapable at maturity of so adapting himself to his environment or to the requirements of the community as to maintain existence independently of supervision or external support.*"<sup>3</sup>

There are various objections to such a definition as sole criterion of feeble-mindedness. The *first and greatest* comes from the fact that the definition really involves two variables: the potentiality for "cerebral development" varies of course a great deal among individuals and likewise the social-economic environment of different individuals varies greatly. An individual living in New York City, London, Paris, or any other large city might be a social-economic failure and yet have a higher degree of intelligence than a fairly successful Kentucky "moonshiner." We cannot of course study or evaluate the individual except in relation to his environment, and therefore if we are to compare different individuals with respect to some natural capacity obviously we must measure this capacity in terms of a common environment (objective measure).

In the *second place*, we are confronted with the troublesome matter of drawing a line between the individual who barely succeeds in adapting himself (after a fashion) to his social problems and in maintaining himself without external support, and the individual who barely fails to do so. Shall we call the one feeble-minded and the other normal? The definition really implies a sharp distinction between the mentally deficient and the normal; whereas it is well known that no such sharp distinction exists.

<sup>3</sup> Tredgold, A. F., *Mental Deficiency*, 4th. ed., pp. 8-9. Baillière, Tindall and Cox.

*Thirdly*, the definition fails to provide us with any satisfactory diagnostic criterion. Many individuals of normal intelligence do not make an adequate adaptation to their social and economic environment; and it is often extremely difficult in any given case to determine the nature of the difficulty which has kept the individual from succeeding. It has been quite generally assumed in the past that a well-trained physician, by giving an individual a physical examination and asking him a few questions, could in this casual manner determine whether the person were feeble-minded, and Tredgold seems to make some such assumption. But we may say here, and most emphatically, that except in the case of the individual who is extremely low in intelligence only a most painstaking examination by means of proper objective tests by one thoroughly trained in administering such tests, plus other equally careful examinations (to be mentioned later) will enable one to say with any degree of certainty what the person's intelligence status is.

In 1904 the Royal Commission of Great Britain adopted a *social-economic* definition of mental deficiency which was as follows: "A feeble-minded person is one who is capable of earning a living under favorable circumstances, but is incapable, from mental defect existing from birth, or from an early age, (a) of competing on equal terms with his normal fellows; or (b) of managing himself and his affairs with ordinary prudence." <sup>4</sup> The same objections are to be made to this definition as have just been offered against Tredgold's which, as the reader has observed, adopts a *social-economic* criterion.

Many communities have adopted a *pedagogical* criterion

<sup>4</sup> Among English writers the term "feeble-minded" is used to designate the highest grade of mentally deficient individuals, termed in this country "morons," and the term "amentia" is used instead of the term "feeble-mindedness" to include all degrees of mental deficiency.

of feeble-mindedness in the case of school children. If a child is three or more years retarded in his school work, he is given a psychological examination and if found mentally retarded he is placed in a special class. Before the advent of psychological methods of examination this pedagogical criterion was frequently the sole basis for determining the mental level of the school child. Obviously such a criterion would fail to distinguish between the feeble-minded child on the one hand and the child who was retarded because of sensory defects, or past illness, or mental deterioration resulting from organic disease, or who had been unable to attend school regularly in the past or who was handicapped because of emotional instability of improper conditioning, etc.

In 1904 a special commission was appointed in Paris for the purpose of segregating the mentally defective children for special instruction. Alfred Binet, Professor of Psychology of the University of Paris, was requested by this commission to undertake the provision of a *psychological criterion* of mental deficiency upon the basis of which defective children could be identified. Thereupon Binet undertook to develop an objective quantitative measure of intelligence. The Binet Intelligence Test is the result of many years of work by him and his collaborators. Now that it was possible to get at the individual's intelligence by means of objective measures it became a simple matter to formulate a psychological definition of it. Binet's measuring scale gave the intelligence of the individual in terms of his mental age (M.A.) and therefore a definition in terms of mental age was formulated. Children of nine years or less who showed a mental retardation of two or more years; children above nine who showed a retardation of three or more years; and adults who had a mental age of not more than twelve were classed as mentally deficient,

provided of course that it could be clearly shown that the defective intelligence in each case was the result of retarded development and not a loss of development.

Following the work of Terman and others in this country, the expression "Intelligence Quotient" (I.Q.) has largely supplanted "Mental Age" as a way of stating the individual's intelligence quantitatively. The I.Q. is obtained by dividing the M.A. by the chronological age (C.A.); and the quotient is customarily expressed in terms of 100. Hence if an individual is eight years old and has a M.A. of eight, his I.Q. is 100; if he is eight and has a M.A. of six, his I.Q. will be 75; if he is eight and has a M.A. of ten his I.Q. will be 125, etc. Consequently it is now possible to use the I.Q. as our criterion in defining feeble-mindedness. A recent definition on this order by Hollingworth is as follows: "A feeble-minded person is one who has originally an intelligence quotient of 70 per cent or less, and whose status falls in the lowest two per cent of human intellect."<sup>5</sup>

Such a definition raises several questions of considerable significance; questions, incidentally, which are not easily settled. In the first place, since we cannot measure the individual's intelligence at birth, we can never be absolutely sure that he has not suffered some loss of original capacity for mental development. Secondly, since the I.Q. represents a ratio between the C.A. and the M.A. we must assume that this ratio remains constant throughout the developmental period, inasmuch as in actual practice the I.Q. is determined for individuals of different chronological ages. That is, to state the matter a little differently, we must assume in the case of any given individual that the ratio between his rate of development during, say, the first five and the second five years of life is the same as that of any other individual. Yet we know that some indi-

<sup>5</sup> *Op. cit.*, p. 52.

viduals develop physically much faster than others (or the average) during the first years of life, while certain others develop slowly up to the age of six, eight, ten, or twelve, and then much faster than the average. And we cannot say at the present time that mental development in certain cases does not follow some more or less unusual rather than the usual course of development; too few studies have yet been made for us to generalize in this matter. Thirdly, there is the question as to the age at which individuals reach their limit of mental development, and as to whether all reach it at the same chronological age. Sixteen has been widely adopted as the age at which mental development ("unfolding" of innate capacity) practically ceases, and in determining the M.A. of an individual who is older than this, sixteen is taken as his C.A. But some believe it would be better to take fourteen as the upper C.A. in determining the I.Q. of adults. Incidentally there is some evidence that mental development does not cease in most cases before the age of eighteen or twenty; and it is also probable that the age at which it may be said to stop varies considerably for different individuals.

**What Is Intelligence?** We have spoken of feeble-minded individuals as being characterized by a considerably lower degree of intelligence than the normal person possesses; but we have said very little as yet concerning the nature of intelligence. It is assumed that the reader has a fairly clear notion of what is meant by intelligence and therefore we shall touch upon it here but briefly. Intelligence is usually studied and defined as the ability of the individual in respect to two general types of adaptive activity; namely, (*a*) to the extent to which an individual has the capacity for acquiring adaptive habitual modes of reaction to his environment, and (*b*) to the ex-

tent to which he has the capacity for adapting to *new* situations, other things being equal,<sup>6</sup> he is intelligent. If we are to consider intelligence as a natural capacity of the individual, then obviously we can study it only as it manifests itself in the person's reactions. The question now becomes, in what way does the feeble-minded individual differ from the normal in his reactions to his environment? We may begin by saying that to a large extent the feeble-minded individual is characterized by an absence of reactions; many aspects of his environment are not, and never become, potent for arousing reactions in him. This fact results because of his inability accurately to perceive and to deal with the less obvious aspects of his environment, with symbols and relationships. He may learn that an apple is good to eat and react accordingly when an apple is placed near him, but be absolutely unable ever to associate the word "apple" with the fruit itself. In other words, he is unable to perceive the word (apple) as a symbol of the fruit, as something which signifies or stands for it. The feeble-minded person is likewise deficient when it comes to reasoning in terms of causal relationships. He may recognize the rain as water but be unable to deduce from the fact of the falling rain the further fact that if he goes out without raincoat or umbrella he will get wet; and, if he is sufficiently feeble-minded, he will be unable ever to make this deduction regardless of the number of times which his getting wet may immediately follow his seeing a cloudy sky, wet streets, falling rain, etc.

Not only does the feeble-minded individual fail to react to the more subtle aspects of his environment but he fails to react adjustively to the more obvious aspects. If given a form-board test he may try again and again to make a

<sup>6</sup> It must be kept in mind that other factors than a lack of intelligence may keep an individual from acquiring adaptive modes of reaction or from adequately adapting himself to a new situation.

circular block fit a triangular depression. He fails to perceive the dissimilarity between the two facts. If asked to reproduce a line of a given length he may draw a line of only half or twice the length of the one before him. He is similarly obtuse to his social environment and therefore usually becomes the butt of practical jokes among his playmates. Or he may be readily induced to play some rude prank on his teacher, failing to perceive correctly the nature of his act.

**Classifying the Feeble-minded.** Between the most intelligent individual and the most feeble-minded there is, so far as is known, no absolute distinction; the one differs from the other only in degree. Next to the most intelligent there are others who are almost as bright, and next to the most feeble-minded there are others who are almost as dull, and next to these there are others, and so on till our gap between the two extremes is completely filled in. Theoretically no two individuals have exactly the same degree of intelligence, but since we are able to measure intelligence only approximately, and furthermore, since in practical life we are able to deal only with fixed values differing from each other considerably, it is customary to distinguish only a few different levels of intelligence instead of eighteen or twenty hundred million. The reader should try to keep in mind, however, that although we speak of all individuals who come within a certain range as having the same degree of intelligence, we are really confronted by a continuous series of gradations the size of which is so small as to be immeasurable. And it then follows that if we adopt some fairly large unit of measure and proceed to divide our continuous series into any number of segments, such a division becomes purely arbitrary and practical, the different segments being separated from each other by no natural line of demarcation.

Terman and many others following him distinguish nine levels or degrees of intelligence as follows:

<i>Classification</i>	<i>Score in Terms of I.Q.</i>
Genius, or near genius	Above 140
Very superior	120 - 140
Superior	110 - 120
Normal or average	90 - 110
Dull or backward	80 - 90
Border-line deficiency	70 - 80
Definitely feeble-minded:	
(a) Moron	50 - 70
(b) Imbecile	20 - 50
(c) Idiot	Below 20

A second classification is in terms of mental age: an idiot is an individual who upon reaching maturity does not exceed in intelligence (or mental age) the normal child of three; the imbecile is one who has the intelligence of the normal child between three and seven; and the moron is one whose intelligence is equivalent to that of the child between seven and ten. English law designates these three classes of mental defectives as follows:

*"The feeble-minded* are persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control for their own protection or for the protection of others, or, in the case of children, that they by reason of such defectiveness, appear to be permanently incapable of receiving proper benefit from the instruction in ordinary schools.

*"Imbeciles* are persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves or their affairs, or, in the case of children, of being taught to do so.

*"Idiots* are persons so deeply defective in mind from birth, or from an early age, as to be unable to guard themselves against common physical dangers."

Some writers subdivide these three classes, speaking of high-grade, middle-grade, and low-grade morons, imbeciles, and idiots. It is obvious that there would be a greater difference in intelligence between a high-grade and a low-grade imbecile, for instance, than between a high-grade imbecile and a low-grade moron. Consequently to speak of an individual as an imbecile or as a moron is not to speak very definitely of his intelligence status. Theoretically at least it would be more exact to state his I.Q. (which many writers do not hesitate to do), but even after giving a person a thorough psychological examination, many of us would hesitate to say dogmatically that he has exactly this or that I.Q. So perhaps as near as we can come at the present time to a definite statement of an individual's intelligence is to class him as a high-grade, low-grade, or middle-grade moron, imbecile, or idiot. The writer personally believes that an individual's intelligence might properly be stated, once he has been thoroughly examined, in terms of his I.Q. score  $\pm$ ; that is, as I.Q.  $50 \pm$ , I.Q.  $60 \pm$ , etc. If the individual's intelligence were stated in this manner, it would indicate that his mental level had been determined in accordance with the usual methods, but it would also indicate a free (or forced) admission on the part of the person who had done the testing (determining) that in the present state of our knowledge of intelligence testing, determining one's mentality is not as simple or as certain a procedure as, for instance, determining one's height or weight. It might even act (and this would be very desirable) as a partial antidote to the unsavory enthusiasm of those many amateur "intelligence testers" who have become firmly convinced as a result of a course (usually during summer school) in mental measurements that equipped with a Binet test blank they are able within an hour's time to determine accurately the intelligence status of anyone.

**Identification of the Feeble-minded.** But the diagnosis of feeble-mindedness is far less simple than these enthusiastic "intelligence testers" would lead us to believe. It is not so difficult to recognize an idiot or an imbecile or even a low-grade moron, provided, of course, the individual has first been given a careful medical examination, his school history (if any) checked, and his social and economic adaptability carefully studied. But in the case of the high-grade moron and the border-line group, the examining committee (social worker, nurse, physician, and clinical psychologist) is often very hard put to it to decide whether the individual is to be labeled feeble-minded and handled accordingly, or to be labeled a border-line case and handled quite differently. For, after all, an intelligence test is not a mechanical device which automatically records an individual's intelligence as a pair of scales records his weight; the test must be administered by another individual, and all of us, however well trained, are prone to err. Indeed, as Pressey points out, "Diagnosis must then be recognized as very largely a matter of expert judgment, based on the facts in their totality rather than on any particular set of symptoms."<sup>7</sup>

Moreover it must be remembered that the determination of intelligence among the moron and border-line classes is first of all a matter of practical and only secondly of theoretical importance. Most states now have fairly rigorous and exact laws relating to the disposition of their feeble-minded population. Consequently if an individual is diagnosed as feeble-minded, it may mean institutional confinement the rest of his life for him and the cost of his up-keep by the state. And in certain states even sterilization of the mentally defective is approved by law.

<sup>7</sup> Pressey, Sidney L., and Pressey, Luella Cole, *Mental Abnormality and Deficiency*, p. 224. Macmillan.

Inseparably associated with the matter of identifying the feeble-minded is the far from settled question as to who shall and who shall not be considered technically mentally defective. Even though we were to assume that the Binet or any other test is as accurate as many claim, we would still be confronted by the troublesome question of where to draw the line between the feeble-minded and the not-feeble-minded. Formerly all adult individuals with a mental age of twelve or less were generally held to be technical mental defectives. However some writers have favored a M.A. of ten as the upper limit, while quite recently Goddard, a well-known American writer, has suggested seven as the upper limit, re-defining morons as comprising "that large group of people whom we recognize as of dull intelligence."<sup>8</sup> He goes on to say that they should not be considered as mental defectives since with special training they are capable of becoming to an extent regular members of the social group. If this criterion suggested by Goddard were accepted and universally applied, it would undoubtedly all but remove the danger of a normal or near-normal individual's ever being labeled feeble-minded, for the upper limit is very low. But this, we believe, would do little after all toward solving the social problems presented by the feeble-minded population. Rather we agree with the stand taken by Wallin, Pressey, and others that a diagnosis of an individual suspected of being mentally defective should never be made on the basis of a single criterion—psychological or otherwise—but always in the light of all criteria which have any diagnostic value in enabling one to estimate the person's adaptability to his environment. Pressey states that "(1) educational inadequacy, (2) economic inefficiency,

<sup>8</sup> Goddard, H. H., "Feeble-mindedness; a Question of Definition," *Proc. and Addr. Amer. Asso. Stud. Feeble-Mind.*, 1928, Vol. 33, pp. 219-227.

and (3) social inadequacy, and (4) a distinctively low rating in a carefully conducted series of tests, are essential for a satisfactory diagnosis.”<sup>9</sup> And Wallin forces our attention to the fact that although an individual may rate in an intelligence test (the Binet test) only the intelligence of a high-grade defective, he may nevertheless prove beyond the possibility of a doubt his competency to meet the problems of his social-economic environment. Thus, to mention only one of the cases which he cites, a man who made a rating of 10.6 years had nevertheless raised a family of nine, all high-school graduates and all but one of whom had been one-time students in college, two taking higher degrees. For ten years he was president of the board of education in the small town in which he lived; was a very successful farmer, retiring on a competency of \$30,000; and had always been a law-abiding citizen. This man had made this success despite the fact that he rated only as a high-grade defective, as measured by the intelligence test.<sup>10</sup> A single case of this kind should put the reader on guard against a too ready acceptance of the enthusiastic claims made by some that an intelligence test is an infallible measure of an individual’s mental capacity and that it affords a means whereby his future social-economic adaptability can be accurately predicted.

**The Number of Feeble-minded.** It is generally assumed—and the assumption appears to be fairly well supported—that when the intelligence of a large unselected group of individuals is measured and the individuals are arranged in the order of rank, they will be found to be distributed in accordance with the normal curve of distribution. From this fact it will readily be seen that there are fewer idiots than imbeciles, fewer imbeciles than

<sup>9</sup> *Op. cit.*, p. 225.

<sup>10</sup> Wallin, J. E. Wallace, *Problems of Subnormality*, pp. 223–224. World Book Co.

morons, fewer morons than border-line cases, and so on till the individual (or group) representing the median score is reached; and from this point on the number of individuals for each successive score will become increasingly less till the individual (or group) having the highest score is reached.

A second fact which becomes obvious is that the number of feeble-minded individuals will be determined primarily by the criterion of feeble-mindedness which is in use. If we designate as feeble-minded only those individuals who have a mental age (or a potentiality for attaining a mental age) of 7 or less we shall, of course, have only a fraction of the number we would have were we to use as our criterion a mental age of 12 or less. As we have said, it is customary at the present time to classify all individuals as feeble-minded who have an I.Q. of 70 or less. Terman found, in 1,000 school children whom he tested, that 1 per cent had an I.Q. of 70 or less, 2 per cent had an I.Q. of 73 or less, and 3 per cent had an I.Q. of 76 or less.<sup>11</sup> But these were school children and apparently did not include the idiot, the imbecile, and the lower part of the moron group. Perhaps we can safely say that according to the present psychological criterion of mental deficiency, one-half of one per cent of the population is feeble-minded.

**Clinical Types of Feeble-mindedness.** Most writers distinguish two general types of feeble-mindedness or amentia: primary amentia, and secondary amentia. Until more recently it has been quite generally assumed that primary amentia was the result only of defective germ plasm (heredity), while secondary amentia was the result of extraneous or secondary factors of various kinds. But more lately this largely theoretical etiological distinction

<sup>11</sup> Terman, L. M., *The Measurement of Intelligence*, p. 82. Houghton, Mifflin.

is tending to disappear because different writers have seriously questioned the assumption of a sole hereditary factor as the cause of so-called primary amentia. Leaving the matter of causation to a later topic, we may distinguish, in accordance with the present trend, a number of different types of feeble-mindedness on the basis of clinical features alone.

The great majority of feeble-minded individuals (perhaps 90 per cent) present no characteristic clinical features. There is nothing about their external appearance which indicates that they are mentally deficient. As a group they are not quite as heavy or as tall or as strong as the average for normal individuals; but the difference is not great and does not in any sense provide us with a diagnostic criterion. Some writers speak of this group of individuals as *primary aments*, implying that the mental deficiency is primary, that is, due to heredity.

The remaining 10 per cent of mentally deficient individuals comprises a fairly large number of different clinical varieties; the person being characterized in each case by one or more physical features (stigmata of degeneracy) which in general and to a certain extent are indicative of feeble-mindedness. We shall mention only a few of these clinical types.

1. *Cretinism*. A typical cretin, one several years old and who has never received treatment, presents very definite clinical features. He is infantile in appearance, short in stature, usually very fat, short legged, slow in his movements and apathetic in general. His skin is yellowish, dry, thick and wrinkled; his head is large, lips thick, tongue large and often protruding. Unless he is given treatment he may never grow to be more than thirty inches in height and he never completely loses his infantile appearance. Upon reaching maturity (in age),

his intelligence may be anywhere between moronity and low-grade idiocy.

It appears to have been thoroughly established that cretinism results from an absence of or deficient thyroid secretion. If the condition is recognized early and the extract of thyroid glands is administered, the individual may develop fairly normally both physically and mentally. Some believe the thyroid deficiency to be of hereditary origin, while others believe it to be the result of infection.

2. *Mongolism or Mongolian Amentia*. Individuals belonging to this type strongly resemble in certain of their physical features the Mongolian race, hence the name. The features of which anomalies most commonly exist are the skull, the eyes, and the tongue. The skull is small, diminished in its antero-posterior measurement, and round. The back of the head is considerably flattened. The slits (palpebral fissures) formed by the meeting of the eyelids slant downward and the eyelids are usually red and inflamed. The tongue is marked by deep transverse fissures and is unusually large. Besides these features, which are almost always present, the mongolian usually has dry, wiry hair, rounded ears, a short, flat nose, and loose ("double") joints.

Up to the present time mongolism has remained incurable and the cause is still unknown. Different writers have suggested almost everything from syphilis to an abnormal pressure upon the fetus as a result of an unusually small amniotic sac to account for it. One theory appears to be as good as another. All mongolians closely resemble each other, two very rarely occur in the same family, and they seldom live very long, the average life-span being fourteen years.

3. *Hydrocephalus or Hydrocephalic Amentia*. The outstanding clinical feature of this condition is an extremely

large skull. And the largeness of the skull is unquestionably the result of an over-accumulation of cerebro-spinal fluid, which may amount to several pints. As a result of the great pressure exerted by the fluid, the brain tissue adjacent to the ventricles is gradually thinned and destroyed. Naturally this causes mental enfeeblement and an impairment of mental development. Apparently there are all degrees of hydrocephalus; if the accumulation of fluid is not too great the mental impairment will be correspondingly less; if the fluid is very excessive death may result. Most cases of hydrocephalic amentia belong to the imbecile and moron levels. Apparently where the condition is sufficiently acute to have caused idiocy, death soon results.

There is no known satisfactory treatment for this condition. Draining off a part of the cerebro-spinal fluid does not have any lasting effects. Likewise the cause of the over-accumulation of the fluid is unknown.

4. *Microcephaly or Microcephalic Amentia.* In certain respects the clinical features of this condition are the opposite of those found in hydrocephalic amentia; the skull is usually very small in circumference, averaging about 17 inches. But, according to Tredgold,<sup>12</sup> the shape of the skull is a more reliable diagnostic feature than its size. The back of the head is flattened and there is a marked recession of the frontal region. Also, incidentally, these individuals usually, if not invariably, have a markedly receding chin. Naturally the brain weight, along with the skull capacity, is markedly deficient. One individual has been reported whose brain weighed only 170 grammes (the average weight for males being 1,374 grammes and for females 1,244 grammes). Aside from their small and peculiarly shaped skull, these patients are characterized

<sup>12</sup> *Op. cit.*, p. 230.

(usually) by a short stature, few of them attaining a height greater than five feet.

The cause of the condition is not yet established. One view is to the effect that it results from a premature closing of the cranial sutures. This theory has been largely discredited, however, since it has been observed that cases exist in which the sutures are still open. A second theory is that it is a matter of atavism, a reversion to a simian type. This theory likewise appears to have been quite conclusively disproved as a result of careful studies and examinations of a large number of cases. Tredgold contends that the condition is due to defective inheritance, and therefore he includes it under primary amentia.<sup>13</sup>

5. *Syphilitic Amentia*. An individual belonging to this class may or may not present stigmata of degeneracy (clinical features). Those stigmata which are most commonly found are Hutchinson's teeth (deeply notched front teeth usually somewhat fan-shaped and widely spaced), "rosebud" mouth (mouth with radiating lines or fissures), cleft palate, flattened nose, missing digits, club feet, strabismus, asymmetrical face, etc. However, since none of these signs may be present, a diagnosis is frequently made on the basis of a positive Wassermann, a history of syphilitic infection in the parents, and an absence of other etiological factors. In the absence of stigmata of degeneracy it is impossible offhand to distinguish between these patients and ordinary mental defectives (simple aments). They usually range in intelligence from imbecility to high-grade morosity.

This form of amentia results from the contraction of syphilis *in utero*, that is, from congenital syphilis. At least

<sup>13</sup> We might point out that Tredgold also includes Mongolism under primary amentia, contending that it too is a matter of inheritance. We shall have more to say concerning heredity as a causal factor when we take up the causes of feeble-mindedness.

it is assumed that syphilis is an essential factor. Inasmuch as not all cases of congenital syphilis are feeble-minded, there are perhaps in any given case certain other factors of a predisposing kind. The syphilitic ament usually suffers mental deterioration, develops various complications, and dies of paralytic dementia. At the present time there is no cure for the condition.

6. *Feeble-mindedness Associated with Epilepsy.* A very appreciable number of feeble-minded individuals are subject to fits and convulsions of an epileptic nature. Where the seizures are frequent and severe, there is usually apparent a very noticeable degree of mental deterioration; and from this fact many writers assume that the feeble-mindedness (really dementia) results from the epilepsy. However, our knowledge of the whole matter is very uncertain, due primarily to the fact that very little is really known about the nature and cause of epilepsy. Although it appears quite probable that in the case of a feeble-minded epileptic there is a causal relation between the two conditions, it appears equally probable that they are both manifestations or results of the same morbid process, whatever its exact nature.

There are many other varieties of feeble-mindedness from an etiological point of view, but the ones we have mentioned are the more common and outstanding clinical forms. We shall allude to, or at least imply, other types in our discussion of causation.

**Causes of Feeble-mindedness.** Despite the many statements of mathematical exactness to the contrary, there is really no topic in the whole field of abnormal psychology (including feeble-mindedness) concerning which less is actually known than the causes of mental deficiency. And we can perhaps do no better by way of helping the reader to a healthy skepticism toward any one of these

various dogmatically stated opinions than to quote a few lines from one who has spent years in the study of feeble-mindedness and who is certainly as familiar as anyone with all the pros and cons of the question.

"Many theories of feeble-mindedness have been advanced. It is a spontaneous generation, a sport, a mutation; it is an atavistic phenomenon, a reversion to a primitive type; it is an 'uninterrupted transmission', 'a direct inheritance', 'through two hundred generations or more' of defective strains 'from our animal ancestry'; it is a variation due to hereditary taint, transmitted either according to the Galtonian or Mendelian formula; or some cases represent formative defects, some are functional, some traumatic, some are due to disorders of the endocrine glands, etc.

"Amid this welter of discordant views and in the present stage of enlightenment, it would seem bold indeed to attempt to formulate a consistent, adequate, workable theory of causation. Certainly the facts are not yet all in; we do not yet have a sufficient body of incontestably established facts to warrant anything in the nature of a final formulation. Anything like finality will have to await the further development and extension of the technique of experimental genetics." <sup>14</sup>

In connection with our mention of the different clinical forms of feeble-mindedness we spoke briefly of some of the different theories of causation. However our discussion of clinical forms left out of account that great mass of feeble-minded, the "primary aments," and it is specifically with respect to these that we shall now speak.

We may distinguish, at least theoretically, four classes of causation: (a) hereditary, (b) prenatal, (c) postnatal, and (d) multiple.

It appears to be the opinion of most writers that the most important, or frequent, factor in the production of

<sup>14</sup> Wallin, J. E. Wallace, "Studies of Mental Defects and Handicaps," *Miami University Bulletin*, Series XXII, No. 5, Jan., 1924, p. 112.

feeble-mindedness is heredity; but exactly what the frequency and importance of this factor is is a matter of considerable disagreement. Tredgold holds that 80 per cent of mental deficiency is due to a "neuropathic inheritance," Goddard estimates at least two-thirds of cases to be a matter of inherited defect, while Hollingworth remarks, "There is now no competent student of the heredity and transmission of mental traits who would dissent from the statement that feeble-mindedness is hereditary. . . . Heredity is the source of most of the mental deficiency with which the social order is burdened."<sup>15</sup> Others have found evidence of hereditary taint in only 45 or 50 per cent of their cases. The disagreement among these findings is undoubtedly due in part to the different criteria adopted by the different investigators of hereditary taint. For instance, Goddard has contended that feeble-mindedness is the only hereditary antecedent of feeble-mindedness, while a second writer, H. C. Marr, has argued that the "inheritance is chiefly insane."

The chief difficulty at the present time is our lack of knowledge concerning the extent to which the psychoses, neuroses, emotional instability, etc., are hereditary, and secondly, the genetic relationship between these conditions and mental deficiency. In other words, shall we in a given case of feeble-mindedness consider insanity in a grandparent, or emotional instability in a parent, or epilepsy in a brother or sister, or "mental peculiarity" in aunts and uncles as evidence quite conclusive of its hereditary nature? Obviously to do so would be very questionable procedure in the present stage of our knowledge of the complexity of inheritance.

Within recent years several studies of the inheritance of feeble-mindedness have been made; but none of these

<sup>15</sup> *Op. cit.*, p. 213.

affords a safe basis for generalization. In the first place the methods employed in these studies—although they may have been the only possible ones—leave much to be desired; secondly, there is the problem of the criteria of mental deficiency and how much weight should be given the individual's I.Q. in the absence of a complete social-economic history; and thirdly, there is the matter of the diagnosis itself and the competency of the individual who makes it. An example of such studies is the "Kallikak Family" by Goddard. Investigators were trained in the gathering of relevant facts and in the making of diagnoses and then sent out to collect data on the descendants of Martin Kallikak (a fictitious name, of course) and two women by whom he had children. Martin Kallikak was a soldier in the Revolutionary War who, we are told, had a son by a feeble-minded girl. From this union 480 individuals have been traced, of whom 143 are said to have been definitely feeble-minded. Martin later married a normal girl and of the 496 descendants from this second union not one has been feeble-minded, while educators, lawyers, physicians, land owners, etc., predominate among them. The study sounds not only interesting but quite startling in its revelations. But we must remember that many of the individuals reported in this study, inasmuch as they were already dead, were never seen by the investigator; that the data were necessarily far from complete in the case of some who were living; and that while Dr. Goddard interpreted these data, other individuals collected them (made the observations). We must also take note of the great difference in environment and opportunities which inevitably existed between Martin's son by the feeble-minded girl and his children by his wife. Finally, as a young woman college student recently asked, "How do we know that Martin Kallikak's so-called son by the feeble-minded girl was

really *his* son?" Indeed, although the court may see fit to accept the word of an unmarried mother as to the father of her child and although to do so is quite in keeping with certain traditional ethics, science is usually more exact in its methods—and then, too, we are told this girl was feeble-minded!

We come back to our statement that it is not known to what extent feeble-mindedness is a matter of inheritance. If intelligence is a natural trait or a number or composite of natural traits, we should expect to find a considerable amount of variation among individuals with respect to it. But there appears to be both a greater number of variations and a greater degree of variation below the average intelligence than above. This suggests that natural variation might be the prime factor in the case of the moron and perhaps the higher grade imbecile, whereas there are possibly always additional causative factors in the case of the lower degrees of deficiency. A second fact which seems to support such a view (additional causative factors) is that in the lower animals there is apparently no such wide variation in intelligence. The writer has been around horses a great deal and he has observed that they certainly differ considerably in their learning capacity but he has never known one that was unable to learn to a very appreciable extent; that could not learn, for instance, to stop at the command "Whoa!" Yet this is beyond the learning capacity of the low-grade idiot. In harmony with this observation is the fact that as compared to man the lower animal is subjected to very few unnatural environmental influences both prenatal and postnatal, such as drugs, disease, emotional disturbances, accidents at birth, and physical trauma.

Of the *prenatal causative factors in feeble-mindedness* we shall mention only two, *syphilis* and *alcohol*. It appears to

be quite definitely established that syphilitic infection of the embryo or fetus may result in mental deficiency. The reader should bear in mind, however, that this is a matter of true syphilitic infection and that we should therefore speak always of congenital and not of inherited syphilis. Strictly speaking syphilis cannot be inherited; it is a germ disease and for it to be inherited the germ would have to become an integral part of the germ plasm of the individual, which is, of course, inconceivable. There is some evidence, however, that the toxins produced by the life activity of the syphilitic germ may affect the germ plasm and that the damage done may be passed on essentially as a matter of inherited defect.

In any case of syphilitic amentia there is always the possibility that the syphilis is not the sole cause of the deficiency. For after all, not every case of congenital syphilis is feeble-minded, and moreover syphilitic aments differ considerably in degree of defect. Consequently it appears that the nervous system of one individual may be more susceptible to syphilitic infection than that of another, and this matter of susceptibility may itself be a matter of inheritance, or it may have been determined in part by other factors. It is likewise probable, however, that the degree of defect will depend largely upon the age of the fetus at the time of infection. Finally, we may point out the fact that if intelligence is to be considered a matter of native capacity and if we think of the individual as coming into existence at the time of conception rather than at the time of birth, then syphilitic amentia is, strictly speaking, syphilitic dementia.

Is alcoholism a cause of feeble-mindedness or is feeble-mindedness a cause of alcoholism? Those who consider heredity to be *the* cause of mental defect are inclined to answer the first question in the negative and the second

in the positive, and those who believe in secondary causes of mental defect tend toward the opposite view. There seems to be no obvious reason for not accepting both views, not with respect to a single individual but to a number of successive generations. If alcohol has the vitiating effect upon the germ plasm that some contend, it might be at least partly responsible for feeble-mindedness in the offspring, and feeble-mindedness in the offspring might, and perhaps is, conducive to excessive use of alcohol. Consequently we might have a sort of vicious cycle.

Most of the experimental work in genetics with alcohol has, naturally, been done with lower animals, and the results have not always been in agreement. But after the evidence pro and con has been weighed, the balance appears to be in favor of the contention that the embryo or fetus is not immune to alcoholic poison in the mother and also that the germ plasm is not immutable to the forces which act upon the individual. That alcoholic poisoning of the mother, or any other kind of poisoning, should affect the embryo, at least temporarily, seems very probable. As Wallin says, "The embryo of a drunken mother is like another drunkard, for both are nourished by the same blood stream."<sup>16</sup> With respect to the influence, if any, of alcoholization upon the germ plasm we are unable to speak with any degree of certainty. Experimental work on the genetic effects of alcoholization of guinea-pigs over a prolonged period of time has shown that a male which has been treated in this manner begets defective offspring even when mated to a healthy female and that the effects carry over to the second generation. This may not mean that analogous results would be obtained in the case of human beings or that if defects

<sup>16</sup> Wallin, J. E. W., *Problems of Subnormality*, p. 446. World Book Co.

were produced they would involve intelligence. Nevertheless the long-honored tenet that the germ plasm is immutable and unmodifiable by environmental agencies appears to be giving way in the face of experimental studies.

We can be no more definite with respect to the *postnatal causative factors in feeble-mindedness* than we have been with respect to hereditary and prenatal influences. Tredgold mentions four types of postnatal factors which he contends may result in feeble-mindedness; these are: traumatic, toxic, convulsive, and nutritional factors.<sup>17</sup>

An example of evidence of a physical trauma causing feeble-mindedness would be somewhat as follows. When the child was two or three years old he fell from a two-story window and struck on his head. Although he did not appear to be seriously hurt, nevertheless he required medical attention and was not himself again for a number of days. We are told by the parents that up to the time of the fall the child was perfectly normal but that soon after the accident he began to grow dull or failed to learn as he should and became more obviously defective as time went on. There is no history of hereditary taint, alcoholism, or syphilis in the family. In short, no causative factors can be discovered other than the fall, and therefore it is assumed to be the cause of the mental deficiency. But just how safely may we make such an assumption? Not every child who has a severe fall or in some other way receives a blow to the head grows up mentally deficient. Moreover there is often in addition to the traumatic episode a history of syphilis or alcoholism or evidence of hereditary taint, making it impossible even inferentially to assign any definite significance to the trauma or to any single one of the different factors. We can only say that in any given

<sup>17</sup> *Op. cit.*, p. 40.

case a physical trauma to the head during infancy or early childhood may reasonably appear to have been the cause of the mental defect if it exists in the absence of other assignable causes, or as a partial cause when it exists together with other probable factors. Along with traumatic causes we may include protracted labor during birth and instrumental delivery.

It has been held by some that feeble-mindedness may result from toxic poisoning of the brain due to scarlet fever, diphtheria, measles, rhinitis, and other diseases of childhood. Needless to say the mother can always account for the mental retardation of her child in this way if the physician cannot. Let it suffice to say that feeble-mindedness perhaps rarely if ever results solely from such factors. On the other hand it appears not at all improbable that an excessive use of alcohol or other drugs during early childhood may have a deleterious effect upon the development of the brain as upon the body in general.

Some writers have contended that "teething convulsions" as well as convulsions of an epileptic nature may result in mental retardation. But Tredgold argues that in the first place no sharp line can be drawn between these supposedly different types of convulsions, and secondly, that both the convulsions and the mental deficiency are probably due to a neuropathic predisposition, that a child of good heredity does not have convulsions during teething even though his gums are very swollen and painful.

With respect to the influence, if any, of malnutrition upon mental development, little that is definite can be said. Dr. Smiley Blanton<sup>18</sup> and others of the Medical Corps of the United States Rhine Army of Occupation made a study of the nervous and mental conditions of

<sup>18</sup> Blanton, Smiley, "Mental and Nervous Changes in the Children of the Volksschulen of Trier, Germany, Caused by Malnutrition," *Mental Hygiene*, July, 1919.

school children between the ages of five and a half and fourteen years and endeavored to determine to what extent these conditions were the result of malnutrition. Their conclusions were to the effect that the dull, border-line, and feeble-minded children had been made more defective by malnutrition but that normal children had not been affected. It seems hardly likely, however, that normal children were not affected (or only "rarely") if, as the author of this study states, "The feeble-minded drop to lower levels of intelligence. The border-line defectives become like the definitely feeble-minded, and the normally dull children become like border-line defectives." Perhaps there was an effect upon the normal children but not, in most cases, to an appreciable extent. Experimental work upon lower animals has conclusively shown that a too restricted diet may have a very injurious physical effect, and may even in some cases cause death.

Perhaps most cases of feeble-mindedness are results of a *multiplicity of factors*. It is indeed very probable that our customary assumption that a given potentiality for mental development is something which is fixed and absolute is entirely wrong. We believe that it is both illogical and incompatible with all known facts to speak, with respect to a number of individuals, of different potentialities for development (different hereditary constitutions) *unless we have in mind strictly similar environments, including both prenatal and postnatal influences*. None of us believes, for instance, that the physical development of an individual is independent of the environmental forces in which he grows up; an insufficient and too restricted diet results in stunted growth both in man and in the lower animal, and once the individual has reached maturity or near-maturity his retarded development cannot be completely overcome; an extreme lack of physical exercise results in poorly

developed muscles and in poorly coördinated movements; isolation from the environment because of sensory defect leaves the individual stunted both physically and mentally. Hence it seems only logical to suppose that environmental influences have an effect upon the individual's mental development which after all, we must believe, is but an aspect or certain way of viewing his physical development. And it must be remembered that the most important period of the individual's development is during his intra-uterine life and the first few years immediately following birth. Given two pregnant women one of whom has the proper kind of food, gets the right amount and kind of exercise, is happy and contented, has no strongly emotional disturbances or glandular irregularities, sleeps well and does not use alcohol or drugs, and the other of whom does not have wholesome food, works too hard and rests too little, is frequently moody and emotionally excited and suffers from "nervous indigestion" is unhappy and worried most of the time, drinks an excessive amount of coffee to keep going, and takes veronal in order to sleep, shall we say that their offspring have had equal chances for normal development up to the time of birth and that since the child of the latter is mentally defective that it is due to poor heredity inasmuch as a grandfather died in an insane asylum? Is it not at least conceivable that had the child in the latter case been given the same intra-uterine environment as the former, it too might have been normal? At least we cannot say that it would not have been. The germ plasm (heredity) is not something which exists in entire isolation from all other facts and forces (at least not after it has entered into the formation of a new individual). But we are unable at the present time to say in a given case what is due to heredity and what to environment; so we can only reiterate our former

statement that perhaps most cases of feeble-mindedness are the result of a multiplicity of factors. We believe that it is relatively easy to grow up feeble-minded in a "feeble-minded" environment.

**Some Things which Do Not Cause Feeble-mindedness.** It has long been a popular superstition that *consanguinity* results in feeble-minded and degenerate stock. However there is no evidence in support of such a contention; the various studies which have been made show that blood-relationship as such has nothing to do with degeneracy. Undoubtedly the superstition grew up as a result of getting the cart before the horse in our reasoning. It is perfectly true that both in this country and in other places there are communities which have an unusually high percentage of feeble-minded individuals; and it is equally true that in most cases there has been a great deal of incestuous mating. But then we merely have poor heredity and unwholesome environmental factors producing, inevitably, degenerate individuals. There is no evidence that, given the same environment, two feeble-minded (or normal) cousins are more likely to produce feeble-minded offspring than are two unrelated feeble-minded (or normal) persons.

A second superstition which is still with us is to the effect that a mother may "mark" her child; and this has been carried over to the matter of feeble-mindedness. Let it suffice to say that the sight of crippled, insane, or feeble-minded individuals will not cause a pregnant woman's offspring to be crippled, insane, or feeble-minded. At the same time a severe emotional shock due to such things may, so far as we know, have some effect upon the fetus by way of toxic poisoning. But it is highly probable that a single emotional shock however severe never caused feeble-mindedness.

**The Social Significance of Feeble-mindedness.** Using the term "social" in a broad sense, we may distinguish three aspects of this problem: the *legal*, the *educational*, and the *economic*. The feeble-minded individual is more prone to the commission of anti-social acts, other things being equal, than is the normal individual. This results not from the presence in the former of any criminal or anti-social "instinct," as some have contended, but rather from the simple fact that the feeble-minded person is less capable than the other economically, of learning to make social distinctions, to develop moral concepts, and to evaluate the probable consequences of his acts. In other words, the feeble-minded individual is more likely than the normal to engage in anti-social conduct for the same reason that the child is more likely to do so than the adult.

Many writers contend that a large percentage of criminals, prostitutes, hoboes, and unmarried mothers are definitely feeble-minded and argue that the antisocial conduct is a result of the feeble-mindedness. But it is never safe to generalize in such a manner; most anti-social individuals are not feeble-minded and consequently, since we have to account for their anti-social behavior in some other way, it is always possible that a similar explanation might fit any given feeble-minded case. In terms of our psychology of the normal individual (see Chapter II) we may distinguish two classes of anti-social individuals: (*a*) those in whom it has been impossible because of deficient intelligence to develop moral (social) sentiments which would act as inhibitors to anti-social impulses and desires, and (*b*) those in whom the proper sentiments have not been developed because of the wrong kind of training (environment). Now the higher-grade defective has the potentiality under the proper, environment, for developing moral sentiments to a very

reasonable degree, but his environment is often not such as is conducive to the development of them. Consequently we cannot say that his deficient intelligence is the cause of his anti-social conduct; rather his environment or training (society) is to blame. From what we have said it will be clear that the legal definition of individual responsibility has very little indeed to support it from a psychological point of view.

*Educationally* the problem of mental deficiency is of considerable importance. An attempt is being made at the present time to meet the problem through the establishment of special classes and of special schools for the instruction of those who are too defective to do regular school work. There are now in New York City alone over 250 special classes for backward children.

But of course the lower-grade defectives are unable to profit by instruction in ordinary school work. The idiots and imbeciles and some of the morons present a hopeless problem so far as formal education is concerned. The higher-grade imbeciles and the morons can be taught to use their hands to a fairly efficient extent and consequently are now being trained in simple manual arts such as rug making, basketry, carpentering, and gardening. No attempt is being made any more to educate in any sense the idiots and lower-grade imbeciles.

*Economically*, the mentally defective class constitutes, according to most authorities, a heavy burden on society. This results not only from the necessity of taking care of the physical needs of the lower grades, their food, housing, clothing, supervision, etc., but also, and to a greater extent, from the special instruction, anti-social behavior, and economic incompetence of the higher grades. For instance, Terman estimates the cost of California's mentally defective class to be in excess of \$5,000,000

annually. Two-fifths of this amount is expended in the prosecution and care of criminals and misdemeanants, and the other three-fifths is incurred by the diseased, alcoholic, prostitute, and pauper classes of mental defectives.

It seems obvious that a real solution of the legal, educational, and economic problems presented by the mentally defective class is to be sought in the prevention of feeble-mindedness.

**Preventing Feeble-mindedness.** There are those who argue that we need our feeble-minded, that society has a place for them sweeping streets, hauling garbage, and doing other unpleasant tasks which you or I would not care to do. But such an argument is too absurd and too steeped in self-complacent egoism and sentimentality to require refutation.

We may mention three methods which have been suggested as means of preventing feeble-mindedness, or at least of decreasing it: supervision, segregation, and sterilization. Those who advocate supervision have certain strong arguments in their favor. First and fundamentally, feeble-mindedness *is a social problem* and only secondly a problem in eugenics, medicine, or psychology. Consequently we see it as a task which the community should take upon its own shoulders; for if there is such a thing as moral obligation, that community (or state) which upholds and fosters the mating of its physical and mental misfits is morally obligated to tolerate and take care of the offspring from such matings. In the second place, it is a well-supported truth that society solves a difficulty only when it is first frankly faced and admitted. Keeping our feeble-minded population with us forces our attention to the problems which it imposes, whereas to isolate or ignore or to pretend that we really need and have a place for our mentally deficient is

simply to pass the problem on to future generations. On the other hand, there are certain objections to supervision both as a method of handling and of preventing feeble-mindedness. From a practical point of view it would entail a great deal of time and money. The proper supervision of a high-grade defective, without a certain degree of segregation and the imposition of physical restrictions, would require a good part of the time of a normal individual; and from this fact it follows that the expense would be very great. And also it is doubtful if supervision alone could ever be made sufficiently effective to lessen materially the incidence of feeble-mindedness.

Some writers advocate *segregation* as the most effective means of handling and preventing mental deficiency. There are at least two serious objections to the method. First, most higher-grade defectives are not identified until after they have propagated, often to a considerable extent, and proved themselves economically incompetent to support their offspring, or until they have committed some crime or are already well along in a life of prostitution or some other anti-social type of activity. In short, as long as segregation waits upon proof of social-economic and moral incompetence of the individual, it cannot prove an effective means of preventing the harmful results which are said to arise from feeble-mindedness. Secondly, the last thing which society should take from the individual is his physical freedom, the privilege to live where he wishes and to go and come as he pleases. And although it is sometimes necessary to take from the individual his freedom for the safety and welfare of society, nevertheless if all feeble-minded and border-line cases were segregated many individuals who are not anti-social types would be done a gross injustice.

*Sterilization* is a third method which has been advocated

for the control and prevention of feeble-mindedness, and several states now have laws legalizing the operation in the case of defectives. The writer believes that in some such method lies the greatest promise of an ultimate solution of the problem. But at the present time there are various obstacles in the way of its practical application. There is a deep-rooted resentment in the "public mind" against taking from any individual the ability to propagate; and as long as such resentment continues, sterilization of the mentally defective will, of course, be highly impracticable. Although a few states have made sterilization of mental defectives legal, it appears that the law is seldom exercised.

Perhaps, as Wallin suggests,<sup>19</sup> the most satisfactory solution of the problems of feeble-mindedness, including its prevention, is to be found in an application of these various methods, the particular method adopted in any given case depending upon the exact nature of the case. Some feeble-minded individuals, the idiots and imbeciles, are undoubtedly best off in institutions; many morons and border-line cases are capable of becoming self-supporting and law-abiding if given the proper training and placed under supervision; others of the higher-grade defectives require institutional supervision because of strongly developed anti-social trends; still others are not even in need of supervision *if placed in the proper kind of environment*. But it must be remembered that the proper and most sensible disposition of any high-grade defective should always await the gathering of all the facts in his case: his past training, his past social-economic and educational history, the presence or absence of anti-social tendencies, and finally a thorough psychological determination of his intelligence status.

<sup>19</sup> *Op. cit.*

## SUGGESTED READINGS

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## GLOSSARY

In the brief glossary which follows, only the more technical terms appearing in this text have been defined. The sole purpose of giving these definitions is to aid the reader in his mastery of the contents of the book, and in many cases, therefore, the definitions have been expressed in somewhat colloquial language. It is hoped that the reader who makes frequent use of the glossary will find himself materially aided in his reading.

**ACCIDENT.** A hysterical symptom of a more or less transitory nature; a hysterical attack.

**ACROPHOBIA.** A morbid and uncontrollable fear of high places.

**AFFECT.** A feeling or an emotion.

**AGORAPHOBIA.** A morbid and uncontrollable fear of open places.

**ALGOLAGNIA.** A sexual neurosis or perversion which consists of deriving sexual pleasure from causing another person to suffer or from being made to suffer by some one else. The suffering (pain) may be either physical or psychical. Active algolagnia is called *sadism*; passive algolagnia is called *masochism*.

**ALLOPSYCHIC.** Pertaining to a relationship existing between the mental life of an individual and the objective world; thus an allopsychic delusion is an abnormal delusion entertained by an individual concerning some aspect of his external environment.

**AMBIVERT.** An individual whose personality is neither typically introverted nor extroverted but in between.

**AMENTIA.** Meaning, literally, without mind; markedly inferior mental capacity originating either before or soon after birth; feeble-mindedness.

**AMNESIA.** An inability, to an unusual or abnormal degree, to recall one's more remote experiences (retrograde) or very recent experiences (anterograde)

ANDROGYNY. The tendency, observed in some men, of the body to approach in form that of the opposite sex.

ANESTHESIA. A decreased sensitivity or responsiveness to sensory stimuli. It may pertain to any of the sensory modes but is most commonly of a tactual or visual nature.

ANOREXIA. Loss of appetite for food; it is often functional in nature, as in anorexy nervosa.

ANTHROPOPHOBIA. A morbid and uncontrollable fear of men or of some particular man.

ANXIETY NEUROSIS. A neurosis in which the chief symptom is anxiety; included in this text under neurasthenia.

ASTASIA-ABASIA. A hysterical condition in which the individual has control of the legs while sitting or lying but is unable to walk.

ATAXIA. Marked incoördination; it may be physical (muscular) or mental, as in the incoherent thinking of schizophrenics.

ATROPHY. Wasting away of some part of the body, as a muscle.

ATTITUDE. A mental disposition resulting largely from conditioning or experience and predominantly cognitive or intellectual rather than emotional in nature; an example would be the average person's attitude toward politics.

AUTISTIC THINKING. Revery or day-dreaming.

AUTOEROTICISM. A sexual neurosis or perversion in which the individual's own body is his sex object; the most common autoerotic practice is masturbation.

AUTOMATIC WRITING. Writing subconsciously or coconsciously, without being aware at the time of it or at least of what is being written.

AUTOPSYCHIC. Pertaining to a relationship between the individual's personality and some phase or aspect of his own mental activity, as a delusional belief entertained by a patient that he is a great inventor (autopsychic delusion).

AUTOSEXUALITY. *See* Autoeroticism.

BESTIALITY. A sexual neurosis or perversion in which the sex object is a lower animal.

**BISEXUALITY.** A sexual abnormality in which the individual is more or less equally attracted sexually to members of both sexes; it is a natural phenomenon in some of the lower animals and, according to Freudians, is natural in the human at an early age.

**CATALEPSY.** A condition found in hypnosis, schizophrenia, hysteria, etc., in which the muscles are semi-rigid and will maintain the limbs in any position in which they are placed.

**CHOREA.** An involuntary contraction of some muscle-group, found most commonly in hysteric individuals.

**CLAUSTROPHOBIA.** A morbid and uncontrollable fear of closed places.

**COCONSCIOUS REACTIONS.** Reactions which are made without normal awareness but which ordinarily (that is, in a normal individual) would be clearly conscious in the usual sense; automatic writing is an example.

**COGNITION.** Used to include all reactions of an intellectual nature, as thinking, perceiving, imagining, etc.

**COMMAND AUTOMATISM.** A tendency, found in many schizophrenics, to carry out in a mechanical sort of way any command given them.

**COMPENSATION.** *See* Compensatory reactions.

**COMPENSATORY REACTIONS.** Any activity which is motivated, at least in part, by feelings of inferiority or fear of failure.

**COMPULSION.** A tendency, over which the individual has little or no control, to perform some act, as repeatedly washing the hands or touching objects.

**COMPULSION NEUROSIS.** A neurosis characterized by one or more compulsions.

**CONATION.** The motivating force or principle in mental activity; urges, drives, or tendencies.

**CONDITIONING.** The phenomenon of an inadequate stimulus becoming adequate for the arousal of a given tendency (reaction).

- CRETINISM.** A type of feeble-mindedness characterized objectively by an infantile appearance, and due to deficient thyroid secretion.
- CRYSTAL GAZING.** Visual hallucinations (or illusions) induced in some people, usually of a hysteric make-up, by gazing at a glass crystal. The hallucinations frequently have to do with some forgotten past experience.
- CURIOSITY.** An innate disposition or, more strictly speaking, the conative aspect of a certain innate disposition.
- DAY-DREAMING.** Thinking which takes place in the absence of any problem, purpose or goal; reverie, autistic thinking.
- DELUSION.** A strong and usually unshakable belief which is obviously false but which nevertheless is maintained. The belief held by a patient that he is Henry Ford would be an example.
- DEMENTIA.** Marked loss of mental capacity; literally, loss of mind.
- DEMENTIA PARALYTICA.** A severe organic psychosis due, in part at least, to syphilitic infection of the cerebral cortex. Also called *paresis* and *general paralysis of the insane*; popularly known as softening of the brain.
- DEMENTIA PRAECOX.** Literally, precocious dementia; schizophrenia.
- DEPRESSION.** Emotional dejection often accompanied by feelings of inadequacy and self-negation.
- DIFFICULTY.** Any fact or obstacle which tends to block or inhibit an individual's reactions.
- DIPLEGIA.** Paralysis of both sides of the body, often functional.
- DISORIENTATION.** If complete, the individual is unable to give the correct date, or to tell where he is, or to tell who he is. Or, he may be disorientated with respect to only one or to two of the three facts.
- DISSOCIATION.** A condition in which the various aspects of the individual's mental integration lose their influence upon each other. Hysteria, dreaming, and schizophrenia are examples. Complete dissociation rarely if ever occurs.

**DISTRACTIBILITY.** A proneness to pay attention to every little occurrence in one's environment; which may also be expressed as an inability to keep the attention on any given fact for any length of time. Monkeys, children, neurasthenics, and manic-depressive patients are examples.

**DRIVE.** The energy or motivating force back of the individual's activity.

**ECHOLALIA.** A mechanical repeating by an individual of words addressed to him. It is often encountered among schizophrenic patients.

**ECHOPRAXIA.** A mechanical repeating by an individual of the movements of another. Some schizophrenic patients repeat every movement made by the person talking to them.

**EFFEMINATION.** A form of homosexuality in men in which the individual's mental make-up closely resembles that of woman; extreme femininity in men.

**EGO.** The personality, as defined in this text.

**EGO-CENTRICITY.** An exaggerated tendency to over-emphasize one's own importance; a sort of feeling that the universe revolves about one's self.

**ELATION.** A feeling of well-being and satisfaction with one's self.

**EMOTIONAL APATHY.** Unconcern or indifference with regard to what is going on around one.

**EPILEPSY.** A disorder, perhaps both mental and physical in nature, characterized by attacks ranging from severe seizures with loss of consciousness to slight and very brief spells of dizziness and abstraction.

**EREUTOPHOBIA.** A morbid and uncontrollable fear of blushing.

**EROGENOUS ZONES.** Different surface-areas of the body which when stimulated by light stroking or handling are said by psychoanalysts to give sexual pleasure. The genitalia, nipples, and lips are said to be important erogenous zones.

**EUPHORIA.** A feeling of extreme well-being and satisfaction with one's self.

**EXALTATION.** Similar to euphoria.

**EXHIBITIONISM.** A tendency to exhibit one's body, particularly the sexual organs, to other individuals. When the tendency is carried to an extreme and constitutes the chief means of deriving sexual gratification, it amounts to a sexual neurosis or perversion.

**EXTRAVERT.** One whose personality is characterized by extraversion. *See* chapter on personality types.

**FETICHISM.** Sexual attachment to some inanimate object or a specific part of the body other than the sexual parts.

**FORECONSCIOUS.** A term used by psychoanalysts to include all facts belonging to the individual's past life that he is able to recall at will.

**FUGUE.** A hysterical attack during which the individual forgets his identity and past life and leaves his immediate surroundings.

**FUNCTIONAL MENTAL DISORDER.** A disorder having no organic basis as such; thus, in hysterical paralysis, for instance, there is nothing organically wrong with the nerves or muscles.

**GLOVE ANESTHESIA.** A form of hysterical anesthesia in which the anesthetic area covers the hand and wrist.

**GYNANDRY.** The phenomenon of a man's body closely approaching in form that of a woman.

**GYNOPHOBIA.** A morbid and uncontrollable fear of women or of some particular woman.

**HALLUCINATION.** A perception which has no external reality, as when a patient sitting in a quiet room hears voices accusing her of wrongdoing.

**HEMATOPHOBIA.** A morbid and uncontrollable fear of blood.

**HEMIPLEGIA.** Paralysis of one side of the body, often functional.

**HERMAPHRODITISM.** The phenomenon of an individual's possessing the sex organs of both sexes. The earth worm is a natural hermaphrodite.

**HETEROSEXUALITY.** Normal sexuality; being attracted sexually to members of the opposite sex.

**HOMOSEXUALITY.** A sexual neurosis or perversion in which the individual is attracted sexually to members of the same sex.

**HUTCHINSON TEETH.** Deeply notched and widely spaced front teeth, indicative of congenital syphilis.

**HYDROCEPHALIC AMENTIA.** A type of secondary amentia (feeble-mindedness) characterized externally by an extremely large skull.

**HYPERESTHESIA.** Heightened sensitivity to sensory stimulation.

**HYPNAGOGIC.** Pertaining to the period between waking and sleeping.

**HYPNOSIS.** A temporary state of mental dissociation artificially produced by psychological methods.

**HYPOCHONDRIA.** A morbid concern about one's health.

**HYSTERIA.** A psychoneurosis characterized by mental dissociation.

**IDIOT.** The lowest grade of feeble-minded individual, having a mental age of not more than three years.

**ILLUSION.** A markedly false perception, as when a mental patient mistakes the male attendant for her missing daughter.

**IMBECILE.** A middle-grade feeble-minded individual, having a mental age of from four to seven years.

**IMPERCEPTION.** Vague or inadequate perception.

**INANITION.** Exhaustion from want of food.

**INCOHERENCE.** Disconnected, unrelated utterances or actions.

**INFERIORITY COMPLEX.** A mental disposition which predisposes the individual to feelings of incompetency and an excessive anxiety concerning all competitive situations.

**INHIBITION.** The checking or control of an impulse (urge) by another urge (which usually belongs to the sentiment of self-regard), the two urges being consciously experienced by the individual.

**INNATE.** Belonging to the inherent constitution; hereditary.

**INSANITY.** Any mental disorder other than feeble-mindedness which makes the individual legally irresponsible and from a medical point of view in need of commitment to a hospital for the care of mental patients.

**INSIGHT.** Refers to the perspective which a mental patient has on his condition. If a patient realizes that he is mentally ill he is said to have insight; if he has no realization of the fact of his illness but thinks he is mentally sound he is said to lack insight.

**INSOMNIA.** Inability to sleep; sleeplessness to an abnormal or unusual degree.

**INSPECTIONISM.** The tendency to look at, inspect, or examine the body, particularly the sexual parts, of members of the opposite sex. When not carried to an extreme it is perhaps a normal aspect of sex activity; but if greatly exaggerated it constitutes a sexual neurosis or perversion.

**INTROVERSION-EXTROVERSION.** Introversion and extroversion are opposite modes of personality expression. See the chapter on psychological types.

**INTROVERT.** One characterized by introversion.

**KLEPTOMANIA.** A strong, often irresistible, tendency to steal; the act of stealing is the expression of a morbid impulse and not a matter of economy.

**LIBIDO.** Sexual energy; the conative aspect of the sexual disposition.

**LUST.** The emotion belonging to sexual excitement; the affective aspect of the sexual disposition.

**MANIA.** The manic phase of manic-depressive psychosis is sometimes spoken of as mania; abnormal excitement and activity usually associated with feelings of elation and satisfaction with self.

**MANIC-DEPRESSIVE PSYCHOSIS.** A mental disorder in which phases of great excitement and excessive activity alternate with phases of depression and psycho-motor retardation.

**MANNERISM.** A peculiar and apparently purposeless recurring gesture, act or grimace, frequently found among schizophrenic patients. Holding one arm or both arms always in the same position or always starting off with the same foot first would be examples.

**MASOCHISM.** Deriving sexual gratification from mistreatment at the hands of another person. It is the opposite of sadism and if carried to an extreme constitutes a sexual neurosis or perversion.

**MASTURBATION.** Typically, obtaining sexual gratification by the self-manipulation of the sexual organs.

**MECHANISM.** Any definite relationship of parts through or by which energy may manifest itself.

**MEDIUMSHIP.** A word belonging to spiritistic parlance. A medium is a person who claims to be able to communicate with the dead.

**MELANCHOLIA.** Used to designate the depressive phase of manic-depressive psychosis; characterized by melancholy, self-negation and usually by self-accusation and psycho-motor retardation.

**MENTAL AGE.** An individual's mental age is that age to which his degree of intelligence normally belongs. The mental age of an individual with normal intelligence is the same as his chronological or actual age.

**MENTAL COMPLEX.** A sentiment which is strongly inhibited or repressed. Thus, an individual is said to have a complex on sex if he becomes greatly excited or embarrassed when sex is mentioned or if he is sexually anesthetic.

**MENTAL CONFLICT.** The simultaneous arousal of two incompatible urges (sentiments or innate dispositions) constitutes a mental conflict. One of the urges belongs to the sentiment of self-regard.

**MENTAL DEFICIENCY.** Feeble-mindedness, amentia.

**MENTAL DETERIORATION.** A decay or wasting away of the mental and emotional life.

**MENTAL SUBNORMALITY.** Feeble-mindedness.

**MICROCEPHALIC AMENTIA.** A form of feeble-mindedness characterized externally by a very small and bullet-shaped head.

**MISOPHOBIA.** A morbid and uncontrollable fear of contamination.

**MONGOLIAN AMENTIA.** A form of feeble-mindedness in which the individual's facial features strongly resemble the Mongolian's.

**MONOPHOBIA.** A morbid and uncontrollable fear of solitude.

**MONOPLEGIA.** Paralysis of a single muscle or a muscle-group. It is often functional.

**MOTOR AGITATION.** Involuntary contractions of the muscles; twitching, jerking, tics.

**MULTIPLE PERSONALITY.** Two or more fairly distinct mental organizations belonging to a single individual, giving rise to two or more personalities.

**NECROPHILIA.** A sexual neurosis or perversion in which the love object is a cadaver (a dead person).

**NEGATIVISM.** A tendency to do the opposite of what one is told to do. Thus, schizophrenic patients will sometimes open their eyes more widely if told to close them. Extreme and often unintentional resistance to suggestions.

**NEOLOGISTIC FORMATION.** The coining of new terms or the use of terms in an unusual sense; often observed in paranoid schizophrenics.

**NEURASTHENIA.** Literally, nervous exhaustion. *See* chapter on neurasthenia.

**NEUROSIS.** A minor mental disorder; psychoneurosis.

**NONADJUSTIVE REACTION-PICTURE.** A group of mental symptoms or nonadjustive reactions so related as to constitute a more or less unified picture.

**NYCTOPHOBIA.** A morbid and uncontrollable fear of darkness.

**OBSESSION.** An involuntary and more or less persistent preoccupation with some thought or fact. Thus, one individual is almost continuously thinking about death, another about being stabbed, another about the number 13.

- OCHLOPHOBIA. A morbid and uncontrollable fear of crowds.
- ŒDIPUS COMPLEX. Sexual attachment or fixation on a parent.
- ORIENTATION. Knowledge of place, time and person.
- OVER-COMPENSATION. *See* Over-reaction.
- OVER-REACTION. Attacking a difficulty with extreme vigor and persistence as a result of feelings of inadequacy or fear of failure with respect to the difficulty.
- PARALYSIS. Loss of the use of a muscle or muscle-group, as inability to use the arms or legs; often functional.
- PARANOIA. A serious mental disorder characterized by permanent and highly systematized delusions.
- PARAPLEGIA. Paralysis of the lower limbs.
- PARESIS. *See* Dementia paralytica.
- PARESTHESIA. Peculiar sensations which are experienced in the absence of any observable stimulus.
- PATHOPHOBIA. A morbid and uncontrollable fear of disease or of some particular disease.
- PEDOPHILLA EROTICA. A sexual neurosis or perversion in which the love object is a child.
- PERSEVERATION. Greatly retarded response to a word or sentence.
- PERSISTENT NONADJUSTIVE REACTION. Any reaction to a difficulty which is persisted in after its nonadjustive nature has become obvious.
- PERSONALITY. The unitary expression of the sum total of mental aspects or functions.
- PERVERSIONS OF SEX. Sexual neuroses or abnormalities.
- PHOBIA. A very intense, morbid, and uncontrollable fear.
- PHOBOPHOBIA. A morbid and uncontrollable fear of fear.
- PSYCHASTHENIA. A mental disorder characterized by obsessions, compulsions, phobias, doubts, feelings of inadequacy, etc.
- PSYCHIATRY. That branch of medicine which deals with mental disorders.
- PSYCHONEUROSIS. A minor mental disorder; a neurosis.
- PSYCHONEUROTIC. An individual with a psychoneurosis.

**PSYCHOSEXUAL CONSTITUTION.** A Freudian term implying a predisposition to mental disorders, particularly hysteria.

**PSYCHOSIS.** A severe mental disorder; popularly called insanity.

**RAPPORT.** As most commonly used it implies an assertive-submissive relationship between two individuals. The peculiar relationship between the experimenter and the hypnotized subject is the best example.

**RATIONALIZATION.** Unknowingly assigning a false motive or reason for a belief, a sentiment or attitude, or for an act which one wishes to carry out but for which he feels a need of justification, the false motive being of such a nature as not only to justify but to conceal the true motive which, if recognized, would cause the individual displeasure. An example would be the jealous woman who says she dislikes her rival because the latter is vulgar.

**REGRESSION.** Regressing or reverting, usually in the face of some difficulty, to an earlier mode of reaction. An adult's weeping when confronted by a difficulty would be an example.

**REPRESSION.** The shunting of an urge into other than its natural or earlier channels of expression with amnesia for the earlier form of expression. This leaves the individual unable to recognize in the manifestations of the urge after repression the true nature of it.

**RETARDATION.** A slowing-up, as in the retarded mental and motor activity of the depressed manic-depressive patient.

**ROSEBUD MOUTH.** A mouth with radiating lines or fissures, usually indicative of congenital syphilis.

**SADISM.** Deriving sexual pleasure by inflicting pain on another person. If carried to an extreme it constitutes a sexual neurosis or perversion.

**SATYRIASIS.** Abnormally exaggerated sexual desire in men.

**SELF-ASSERTION.** Asserting one's self, putting one's self forward.

**SELF-IDENTIFICATION.** Tending to lose sight of one's own individuality and consequently confusing one's self with others or groups or organizations. It is a matter of self-projection.

**SELF-SUBMISSION.** Submitting to others; letting others take the lead; assuming a subordinate position with respect to others.

**SENTIMENT.** An organization of two or more innate dispositions having a common cognitive aspect. It is characterized by its affective (emotional) coloring.

**SEXUAL FRIGIDITY.** Sexual anesthesia; an absence of conscious sexual desire.

**SEXUAL NEUROSIS.** Sexual perversion; sexual abnormality.

**SITIEIRGIA.** Same as anorexy nervosa.

**SITOPHOBIA.** Often used instead of anorexy nervosa; morbid and uncontrollable fear of food or of eating.

**SOMATOPSYCHIC DELUSION.** A delusion pertaining to the individual's own body.

**SOMNAMBULISM.** A trance-like state in which the individual reenacts some former experience.

**STEREOTYPY.** The tendency, common among schizophrenic patients, to repeat over and over the same act, gesture or phrase.

**STERILIZATION.** A surgical operation of a minor nature by which the individual is rendered incapable of propagating.

**STRABISMUS.** Cross-eyedness.

**STUPOR.** Extreme mental and emotional apathy.

**SUBCONSCIOUS REACTION.** A reaction of which the individual is not normally aware, as automatic writing.

**SUGGESTIBILITY.** An exaggerated readiness to carry out the suggestions of another person.

**SUGGESTION.** An implication made by one individual conveyed either by speech or action that a second individual is going to react in a certain manner.

**SYMBOL.** Any thing or fact which signifies to a person some thing other than itself is a symbol of the latter.

**SYMPTOM-COMPLEX.** *See* Nonadjustive reaction-picture.

**SYMPTOM.** A persistent nonadjustive reaction to a difficulty.

**SYPHILITIC AMENTIA.** A form of amentia which is the result, at least in part, of congenital syphilis.

**SYSTEMATIZED DELUSION.** A false central or nuclear belief to which all associated beliefs or ideas are logically related. Thus, an individual believes that he is being persecuted by certain persons and logically related to this central belief is the further belief that it was at the instigation of these persons that he was committed to the mental hospital.

**TIC.** A more or less persistent involuntary contraction of a muscle or muscle-group.

**TOXOPHOBIA.** A morbid and uncontrollable fear of poison or of being poisoned.

**VERBIGERATION.** Continuous repetition of same phrase or sentence.

**VIRAGINITY.** The phenomenon of a woman's mental make-up and sexual feelings approaching those of men.

**VOYEUR.** An inspectionist, a "peeper."

**ZOÖERASTY.** A sexual neurosis or perversion in which the sex object is a lower animal.

**ZOÖPHOBIA.** A morbid and uncontrollable fear of animals.

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